

# IOWA FISH AND GAME PROTECTION FUND

REPORT FOR FISCAL YEAR 2011

## APPENDIX



NOVEMBER 1, 2011  
PREPARED BY

## 1857 CONSTITUTION OF THE STATE OF IOWA – CODIFIED

**Preamble.** WE THE PEOPLE OF THE STATE OF IOWA, grateful to the Supreme Being for the blessings hitherto enjoyed, and feeling our dependence on Him for a continuation of those blessings, do ordain and establish a free and independent government, by the name of the State of Iowa, the boundaries whereof shall be as follows:

[Full Constitution text can be found at: <http://www.legis.state.ia.us/Constitution.html>]

### ARTICLE VII.

[Full Article VII text can be found at: <http://www.legis.state.ia.us/Constitution.html>]

**Fish and wildlife protection funds.** SEC.9. All revenue derived from state license fees for hunting, fishing, and trapping, and all state funds appropriated for, and federal or private funds received by the state for, the regulation or advancement of hunting, fishing, or trapping, or the protection, propagation, restoration, management, or harvest of fish or wildlife, shall be used exclusively for the performance and administration of activities related to those purposes.

Added 1996, Amendment [44]

**IA FISH AND GAME PROTECTION FUND REPORT**  
**APPENDIX B - CHAPTER 462A WATER NAVIGATION REGULATIONS (Boat Registration Fee Use)**

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**CHAPTER 462A WATER NAVIGATION REGULATIONS**

[11/01/11 - Full Chapter text can be found at: [www.legis.iowa.gov/DOCS/ACO/IC/LINC/Chapter.462A.pdf](http://www.legis.iowa.gov/DOCS/ACO/IC/LINC/Chapter.462A.pdf)]

**462A.3 POWERS AND DUTIES OF COMMISSION.**

The commission is hereby vested with the power and is charged with the duty of observing, administering and enforcing the provisions of this chapter. The commission may adopt and enforce rules under chapter 17A as necessary to carry out this chapter and to protect private and public property and the health, safety, and welfare of the public. In adopting rules, the commission shall give consideration to the various uses to which they may be put by and for public and private purposes, the preservation of each body of water, its bed, waters, ice, banks, and public and private property attached thereto, and the need for uniformity of rules relating to the use, operation, and equipment of vessels and vehicles.

**462A.52 FEES REMITTED TO COMMISSION.**

1. Within ten days after the end of each month, a county recorder shall remit to the commission all fees collected by the recorder during the previous month. Before May 10 of the registration period beginning May 1 of that year, a county recorder shall remit to the commission all unused license blanks for the previous registration period. All fees collected for the registration of vessels shall be forwarded by the commission to the treasurer of the state, who shall place the money in the state fish and game protection fund. The money so collected is appropriated to the commission solely for the administration and enforcement of navigation laws and water safety.

2. Notwithstanding subsection 1, any increase in revenues received on or after July 1, 2007, but on or before June 30, 2013, pursuant to this section as a result of fee increases pursuant to 2005 Acts, ch. 137, shall be used by the commission only for the administration and enforcement of programs to control aquatic invasive species and for the administration and enforcement of navigation laws and water safety upon the inland waters of this state and shall be used in addition to funds already being expended by the commission each year for these purposes. The commission shall not reduce the amount of other funds being expended on an annual basis for these purposes as of July 1, 2005, during the period of the appropriation provided for in this subsection.

3. The commission shall submit a written report to the general assembly by December 31, 2007, and by December 31 of each year thereafter through December 31, 2013, summarizing the activities of the department in administering and enforcing programs to control aquatic invasive species and administering and enforcing navigation laws and water safety upon the inland waters of the state. The report shall include information concerning the amount of revenues collected pursuant to this section as a result of fee increases pursuant to 2005 Acts, ch. 137, and how the revenues were expended. The report shall also include information concerning the amount and source of all other funds expended by the commission during the year for the purposes of administering and enforcing programs to control aquatic invasive species and administering and enforcing navigation laws and water safety upon the inland waters of the state and how the funds were expended.

# Fiscal Year 2010 Boat Fee Revenues and Expenditures Report



FOR LIFE-SAVING INFORMATION ABOUT THE DANGERS OF LOW HEAD DAMS, VISIT OUR WEBSITE: [www.iowawhitewater.org](http://www.iowawhitewater.org)

The logo features the text "BE THE DAM SAFE" in large, stylized letters. "BE" and "SAFE" are in red, "THE DAM" is in blue, and "SAFE" is in white with a red outline. To the right of the text is a graphic of a person falling into water, with the words "DROPPING CAN BE DEADLY" written vertically. Below the graphic is the website URL.

Department of Natural Resources  
Conservation and Recreation Division  
December 31, 2010  
Patricia Boddy, Interim Director



## EXECUTIVE SUMMARY

In 2005, in order to provide for continued outreach and resources to the citizens of Iowa, the Iowa General Assembly amended Iowa Code Chapter 462A.52 to increase boat registration fees for all types of watercraft, to change the registration cycle, and to begin requiring the Iowa Department of Natural Resources (DNR) to report on increased revenues and how they are expended until December 31, 2013. This is the fourth such annual report with fiscal year 2010 starting the next 3-year cycle for boater registration funds. This report includes data for FY10 and estimates for the upcoming two years of the cycle compared to the base year in 2006. Please see Addendum C at the end of this report for information about the first 3-year cycle that covers 2007, 2008 and 2009 (“Fiscal Year 2009 Boat Fees and Expenditure Report Executive Summary”).

The increased fees are required to be used to control the spread of aquatic invasive species, the administration of enforcement of navigation laws and for water safety upon the inland waters of the state. The mandate required the Department to submit a report to the General Assembly by December 31 of each year beginning in 2007. It was directed that the report contain, but is not limited to, summarizing the activities of the Department on:

1. Administering and enforcing programs to control aquatic invasive species
2. Administering and enforcing navigation laws and water safety
3. Amount of revenues collected as a result of fee increases
4. Detail of how the revenues were expended
5. Amount and source of all other funds expended
6. Detail of how the funds were expended
7. The amount and source of other funds expended for the above purposes.

### **Revenues: Comparisons and projections**

When boat fees were increased in the 2005 legislative session, the registration period also was changed from two years to three years. For planning purposes, the Iowa Department of Natural Resources must now plan revenues over three years.

**Table 1**

Previous Revenues Under Two-year Registration Periods				
	FY03	FY04	FY05	FY06
Boat fees	\$2,563,493	\$372,481	\$2,611,295	\$387,908
Federal match	\$1,298,443	\$1,296,070	\$1,411,585	\$1,533,266
<b>TOTAL REVENUES</b>	<b>\$3,861,936</b>	<b>\$1,668,551</b>	<b>\$4,022,880</b>	<b>\$1,921,174</b>

Boat fees generated an average of \$1,483,794 per year (see Table 1) during the last four years of the two-year registration cycle. With fee increases and the first three years of actual record, boat fees average \$2,452,304 per year (see Table 2) under the three-year

registration cycle. Fiscal Year 2010 is the start of the second three-year registration cycle since the fee increase. Note that the estimated second and third years of the cycle are much lower than the first year. Most boats are re-registered in the first year (FY10), and only new registrations occur in the other two years (FY11 and FY12), resulting in much lower revenue those two years.

**Table 2**  
Collected Revenues, FY2010 and estimated revenues ,2011 and 2012

	<b>FY10 (Collected)</b>	<b>FY 11 (Estimated)</b>	<b>FY12 (Estimated)</b>	<b>3-Years of Revenue</b>
Boat fees	\$6,144,334	\$812,672	\$399,906	\$7,356,912
Federal match	\$1,491,627	1,496,664	\$1,526,664	\$4,514,955
<b>TOTAL REVENUES</b>	<b>\$7,635,961</b>	<b>\$2,309,336</b>	<b>\$1,926,570</b>	<b>\$11,871,867</b>

With three years of collected annual actual increase in boat fees, the average increase of boat fees is \$968,510 in additional state revenue per year over the base year. Over a three-year cycle (FY10-12) an estimated average total of \$3,957,289 is available to expend per year in state and federal monies on boating related activities eligible to be funded from the boat registration fees. Federal funds include the safety and education portion and motorboat access portion from the Federal Aid in Sport Fish Restoration program, and Aquatic Invasive Species matching funds.

**Expenditures: Comparisons and Projections**

For the purposes of this report, the final year under the previous fee structure, fiscal year 2006, will be the baseline year to measure future years' expenditures. The state salary adjustment each year will be added to the baseline figure, so current programs remain sustainable

**Table 3**  
General Expenditure Categories

	<b>Base FY 06</b>	<b>FY 10</b>
Printing	\$60,274	\$118,710
Boat Safety	*\$2,036,904	*\$2,409,618
Boat infrastructure maintenance/mgt	\$749,406	\$859,951
Aquatic Invasive Species	\$164,556	\$554,295
Water Trails and Dam Safety	\$10,410	\$178,170
Boater Education	\$0	\$106,054
<b>TOTAL EXPENDITURES</b>	<b>\$3,021,550</b>	<b>\$4,226,798</b>

\*Includes the coded boating time of full time officers and the time of seasonal water patrol officers, and associated expenses. See Tables 10, 11 and 12.

**Table 4**

<b>Expenditure Comparison to FY06 (baseline) to FY10</b>			
	<b>FY06</b>	<b>FY10</b>	<b>Increase over baseline year</b>
Aquatic Invasive Species program	\$164,556	\$554,295	\$389,739
<b>Expanded Enforcement &amp; Safety programs</b>			
Water Patrol Officers (temporary/seasonal)	*\$0	\$142,584	\$142,584
Patrol Boats	\$65,182	\$98,821	\$33,639
Boater Education program		\$106,054	\$106,054
Water Trails & Dam Public Hazard program	\$10,410	\$178,170	\$167,760
Enforcement and safety devoted to boating and navigation	\$1,971,722	\$2,168,213	\$196,491
**Boating recreation and safety infrastructure maintenance and management	\$749,405	\$859,951	\$110,546
Printing expenditures	\$60,274	\$118,710	\$58,436
<b>TOTAL</b>	<b>\$3,021,549</b>	<b>\$4,226,798</b>	<b>\$1,205,249</b>

\*Water patrol officers in FY06 were included in the “baseline enforcement and safety devoted to boating and navigation.” This report starts tracking WPO additions starting in FY07. Please see the note for Table 3.

\*\*Neither the Law Enforcement Bureau nor the Fisheries Bureau has land management or maintenance capacity. The Wildlife Bureau manages and maintains state motor boat access areas, boat ramps, and docks in cooperation with the other bureaus. Note that 75% of the total is Federal Aid in Sport Fish Motorboat Access funds.

**Table 5**

<b>Expenditure Comparison to FY06 (baseline) to FY10</b>		
<b>FY06</b>	<b>FY10</b>	<b>Totals</b>
<b>\$3,021,550</b>	<b>\$4,226,798</b>	<b>Expenditures</b>
	<b>\$1,205,249</b>	<b>Increase over baseline year</b>
	<b>+208,314</b>	<b>Comparison to \$996,935 average increase required by code</b>

Over the first four years of the increase authorized by the 2005 legislation, the department has spent over the target increase for boating safety and aquatic invasive species control by +1,554,764.

More detailed reporting of program-level expenses follow in this report.

## Aquatic Invasive Species Expenditures

The Iowa Department of Natural Resources Aquatic Invasive Species Program (DNR-AIS) is responsible for monitoring and managing aquatic invasive species (AIS) in Iowa. Goals of the DNR-AIS as stated in the “Plan for the Management of Aquatic Nuisance Species in Iowa” are:

- I. Minimize the risk of further introductions of AIS into the state of Iowa.
- II. Limit the spread of established populations of AIS into uninfested waters in Iowa.
- III. Eradicate or control to a minimum level of impact the harmful ecological, economic, social, and public health impacts resulting from infestations of AIS in Iowa.



Priority AIS in Iowa include Eurasian watermilfoil (*Myriophyllum spicatum*), zebra mussels (*Dreissena polymorpha*), bighead carp (*Hypophthalmichthys nobilis*), silver carp (*Hypophthalmichthys molitrix*), brittle naiad (*Najas minor*), and purple loosestrife (*Lythrum salicaria*).

This report reflects expenditures for FY10; however, seasonal staff and survey information is from the summer of 2010 (i.e., May through August). Actions utilized to detect, manage, and prevent the introduction and spread of AIS in Iowa in FY 10 included employing seasonal staff, developing partnerships to coordinate AIS activities, increasing public awareness of AIS, managing AIS infestations, and monitoring for early detection of AIS. Major accomplishments included the following.

- Employed 18 seasonal Natural Resources Aides and 3 summer Water Patrol Officers
- Conducted 7,314 watercraft inspections reaching over 21,000 people
- Supported 16 partnerships and cooperative projects
- Distributed brochures, identifications cards, banners, posters, tattoos, maps, and regulations booklets statewide
- Leased 14 billboards with AIS prevention messages on interstate and state highways
- Reached statewide audiences regarding AIS prevention with a public television documentary, travelers information system radio broadcast, radio advertisements, local television programming, news releases, radio and television interviews, and presentations
- Supported volunteer watercraft inspection program in Dickinson County

- Chemically treated 19 waterbodies with Eurasian watermilfoil or brittle naiad
- Surveyed vegetation in 83 waterbodies
- Posted signs at accesses of waterbodies infested with AIS
- Surveyed zebra mussels in Clear Lake and Lake Rathbun
- Placed zebra mussel veliger settlement samplers in 24 lakes and reservoirs statewide
- Sampled water for zebra mussel veligers in Clear Lake, Lake Rathbun and the Mississippi, Wapsipinicon, Maquoketa, Cedar, and Iowa Rivers
- Surveyed Asian carp below the Lake Red Rock dam
- Supported Iowa State University study of Clear Lake
- Purchased equipment for DNR Fisheries management stations to prevent the spread of AIS during operations

**Aquatic Invasive Species Program Personnel and Activities**

A Natural Resources Biologist has coordinated the DNR-AIS since 2000, and a permanent, full-time Natural Resources Technician was added in October 2006. During the summer of 2010, the equivalent of 3 Water Patrol Officers and 16 Natural Resources Aides conducted watercraft inspections and 2 Natural Resources Aides surveyed waterbodies for AIS across the state. Prior to the summer of 2007, the DNR-AIS only hired 2-3 seasonal employees who split their time between watercraft inspections and AIS surveys. Watercraft inspectors discussed inspecting watercraft for AIS with operators from May through September 2010. They collected information on AIS presence and location, watercraft type and state of registration, number of people, last and next waterbody visited, and operator familiarity with Eurasian watermilfoil, brittle naiad, zebra mussels, Asian carp, and Iowa’s AIS law. Trailer stickers reminding boaters to prevent the spread of AIS were given to each operator after inspection. The table below summarizes the watercraft inspection effort of the DNR-AIS for the past five summers.



**Table 6**

Watercraft Inspection Efforts		
	2006	2010
Seasonal Employees	3 PT	19 FT
Watercraft Inspected	791	7,314
Personal Contacts	2,350	21,076
Waterbodies	16	71

DNR-AIS staff supported several partnerships and working groups in FY10:

- Aquatic Nuisance Species (ANS) Task Force
- Mississippi River Basin Panel on ANS
- Missouri River ANS Work Group
- Association of Fish and Wildlife Agencies (AFWA) Invasive Species Committee (Vice Chair)
- AFWA Biofuels Work Group
- National Invasive Species Awareness Week (Steering Committee Member)

- Iowa DNR Fisheries Bureau Aquatic Plant Removal and Introduction Work Group
- Iowa DNR Fisheries Bureau Inland Commercial Fishing Work Group
- Iowa DNR Fisheries and Wildlife Bureaus Shallow Lakes Work Group
- Midwest Invasive Plant Network
- Mississippi River Mussel Coordination Team
- Iowa Wildlife Action Plan Wildlife Management Work Group
- Iowa Wildlife Action Plan Wildlife Work Group
- Iowa Wildlife Action Plan Fish Work Group
- Diversity Action Taskforce
- Iowa Chapter of the American Fisheries Society

During the summer of 2010, the DNR-AIS again partnered with the Iowa Great Lakes Water Safety Council and the lake protective associations on a volunteer watercraft inspection program. The program was designed to supplement efforts of the 6 DNR seasonal staff who conduct watercraft inspections at boat ramps on Dickinson County lakes. The DNR-AIS provided training and supplies for the volunteers. Each lake protective association appointed a lake coordinator for volunteers to contact to schedule their times and locations. The number of volunteers has declined annually since the program began in 2008.

### **Aquatic Invasive Species Outreach Materials**

The DNR-AIS has different types of outreach materials targeting boaters and anglers in Iowa. In addition to signs posted at all boat access sites and information on the Iowa DNR website, the following informational materials were distributed during watercraft inspections, to all Iowa DNR Fisheries regional and field offices, during the Iowa State Fair, at state and county parks and nature centers, at businesses (e.g., marinas, bait shops, sporting good stores), and at presentations and field days.



- Help Stop Aquatic Hitchhikers brochure
- Zap the Zebra brochure
- AIS identification cards
- Keep a Lookout for New Invasive Aquatic Plants in the Midwest flyer
- Don't Dump Your Bait posters
- 2010 Iowa Fishing Regulations booklet
- Handbook of Iowa Boating Laws and Responsibilities
- Stop Aquatic Hitchhikers tattoos, koozies, sun kits
- Spirit Lake, East Okoboji, West Okoboji boaters' maps with car wash locations

The DNR-AIS also provided information through 14 billboards posted along interstate and state highways near high-use and infested waterbodies in Iowa. The 14 billboards leased in 2010 were an increase over 2 that had been leased prior to 2007, 5 leased in 2007, 9 leased in 2008, and 12 in 2009. Twelve new banners with one of the billboard

images were produced and displayed near boat ramps in areas of the state without billboards and at outdoor events.

The Public Television series *Insights* produced and distributed a 6-minute documentary and accompanying PSA on AIS in Iowa. A web-encoded version of each will be available for viewing on the updated Iowa DNR website in 2011.

Exhibits at the 2010 Iowa State Fair included a poster, live Asian carp, and Eurasian watermilfoil, brittle naiad, and zebra mussel specimens.

Statewide audiences were targeted with news releases regarding Asian carp and Eurasian watermilfoil in Iowa, volunteer opportunities within the Iowa DNR, and before the July 4<sup>th</sup> holiday. DNR-AIS staff were also interviewed for radio programs, television stories, and newspaper articles regarding AIS identification and prevention and participated in several fishing and outdoor events.

DNR-AIS staff gave presentations about AIS in a variety of settings in FY10, including:

- Iowa Chapters of the American Fisheries Society and the Wildlife Society Annual Meeting
- Iowa Pesticide Applicators Continuing Education Training
- Iowa DNR Fisheries Natural Resource Aides Training
- Iowa DNR Law Enforcement Water Patrol Officer Training
- Iowa Great Lakes Water Volunteer Training
- AIS-HACCP Training (Nebraska, Iowa)
- Southwest District County Conservation Board Employees Annual Meeting
- Iowa State University Student Chapter of the American Fisheries Society Meeting
- Mills Fleet Farm Kids Fishing Day
- Ding Darling Day at the Mississippi River Museum
- Taking the Road Less Traveled: A Career Conference for Girls
- Outdoor Journey for Girls Workshop
- Becoming an Outdoors Woman Workshop
- Conservation Leaders for Tomorrow Workshop
- Des Moines Isaak Walton League Meeting
- Cedar Rapids Middle School Career Day
- Madrid Elementary Career Day
- Boone High School Career Fair

Data collected during watercraft inspections indicates that public awareness of AIS in Iowa has increased as a result of DNR-AIS outreach activities. Fifty-one percent of boaters interviewed in 2001 said that they were familiar with invasive species. By 2009, that number had increased to 80% statewide. Northwest Iowa has more intensive public outreach efforts compared to other regions in Iowa, and 92% of the boaters interviewed there in 2010 were aware of invasive species.

### **Aquatic Invasive Species Management and Monitoring**

DNR Fisheries staff cooperated with DNR-AIS staff to chemically treat 19 Eurasian watermilfoil (EWM) and brittle naiad (BN) infestations in 2010.

- Camp Sunnyside Pond (Polk County), EWM
- Mill Creek Lake(O'Brien County), EWM
- Percival Lake (Fremont County), EWM
- Scott South Pond (Fremont County), EWM
- Sweet Marsh/Martens Lake (Bremer County), EWM
- Casey Lake (Tama County), BN
- Crawford Creek Lake (Ida County), BN
- Dog Creek Lake (O'Brien County), BN
- Floyd County Conservation Board Pond (Floyd County), BN
- Grundy County Lake (Grundy County), BN
- Koutny Pond (Buchanan County), BN
- Lake Hendricks (Howard County), BN
- Lake MacBride (Johnson County), BN
- Little Sioux Park Lake (Woodbury County), BN
- Mile Hill Lake (Mills County), BN
- Moorehead Park Pond (Ida County), BN
- Morris Park Pond (Lucas County), BN
- Nelson Park Lake (Crawford County), BN
- Yellow Smoke Lake (Crawford County), BN

Natural Resource Aides surveyed aquatic vegetation in 83 Iowa waterbodies in June, July, and August 2010 to monitor for new AIS infestations. Species lists and aquatic vegetation maps were completed for each waterbody surveyed. Fisheries and wildlife biologists and county conservation board staff also monitored aquatic vegetation in their areas during management activities. Four new infestations of brittle naiad and no new infestations of Eurasian watermilfoil were discovered in Iowa in 2010.

- Belva-Deer Ponds (Keokuk County), BN
- Great Western Park Pond (Carroll County), BN
- Plainfield Lake (Bremer County), BN
- Sweet Marsh/Martens Lake (Bremer County), BN

The table below summarizes aquatic vegetation monitoring and aquatic invasive plant management for the past five summers.

**Table 7**

Vegetation Monitoring and Treatment Efforts of the DNR-AIS		
	2006	2010
Seasonal Employees	3 PT	2 FT
Waterbodies Surveyed	65	83
Waterbodies Treated	12	19

Signs are posted at all AIS-infested waterbodies alerting the public about the species present and how to prevent its spread. Eurasian watermilfoil has been identified in 42 waterbodies, including private ponds, in Iowa since 1993, and brittle naiad has been identified in 44 waterbodies since 2003.

Iowa had two interior lakes with known infestations of zebra mussels: Clear Lake (Cerro Gordo County) and Lake Delhi (Delaware County). Zebra mussels were first discovered in Lake Delhi in 2006, and a high-density population became established from the dam upstream to the outlet of Turtle Creek. The failure of the Lake Delhi dam in 2010 eliminated the zebra mussel population in the lake. It is unknown if a population is surviving in the river channel; however, zebra mussel veligers have been sampled in the Maquoketa River below Lake Delhi since 2007. Monitoring will continue in the Maquoketa River to determine the status of zebra mussel distribution and reproduction.

Zebra mussels were first discovered in Clear Lake in 2005. DNR-AIS and DNR Fisheries staff have surveyed zebra mussel densities in Clear Lake each summer since 2006 by counting individuals attached to rock substrate. In 2010, over 95% of the rocks had attached zebra mussels, and zebra mussels were colonizing on each other and on aquatic plants. Zebra mussel densities ranged from 7-70 adults and 0-18 juveniles per square inch in June and 2-33 adults and 0-28 juveniles per square inch in August. In comparison, a total of 12 zebra mussels were found during the same survey in 2006. A water sample collected during the June 2010 survey had 88 zebra mussel veligers per quart of water. Settlement samplers placed in the lake also help determine zebra mussel population size and distribution.

In October 2007, zebra mussels were discovered on a boat that had been transported from the Mississippi River and moored at a marina on Lake Rathbun (Appanoose County) since late June. DNR-AIS and DNR Fisheries staff found no zebra mussels in the lake at that time. Staff conducted dive surveys in 2008, 2009, and 2010 and also found no zebra mussels in the marina or surrounding areas although high water levels hampered the surveys. Additionally, no zebra mussels have been observed on veliger settlement samplers placed in Lake Rathbun each summer since 2008. Very low numbers of veligers (0.05-0.5 per quart) were collected, however, in water samples collected in June and August 2010. Monitoring will continue to determine if an adult population is established in the lake.

DNR-AIS and DNR Fisheries staff placed about 75 zebra mussel veliger settlement samplers in 24 lakes and reservoirs in Iowa in 2010 to monitor for early detection of zebra mussels. Lakes with samplers included Big Creek Lake (Polk County), Black Hawk Lake (Sac County), Coralville Lake (Johnson County), East Okoboji Lake (Dickinson County), Lake Hendricks (Howard County), Lake Macbride (Johnson County), Pleasant Creek Lake (Linn County), Saylorville Lake (Polk County), Spirit Lake (Dickinson County), Storm Lake (Buena Vista County), West Okoboji Lake (Dickinson County), and lakes in the Cedar River floodplain (Bremer, Blackhawk, Linn Counties). No zebra mussels were attached to any of the samplers.

The U.S. Army Corps of Engineers, Minnesota DNR, Wisconsin DNR, Illinois DNR, Iowa DNR and National Park Service staff collected zebra mussel veliger samples from the Upper Mississippi River and selected tributaries during July and August 2010 to monitor trends in abundance and peak veliger production. In Iowa, DNR staff collected samples below Lock and Dam 10 through 18 and from the Maquoketa, Wapsipinicon,

Iowa, and Cedar Rivers. Similar to the Maquoketa River, the Cedar River has the influence of Clear Lake on its zebra mussel population. During high water, the outlet of Clear Lake flows into Willow Creek and then to the Winnebago River, Shell Rock, and Cedar Rivers. Low densities of veligers were found in samples from each of those rivers in 2009. It is unknown if the veligers came from Clear Lake, or if there are adult populations within these rivers. Sample analysis is not complete for 2010.

Bighead carp have been reported throughout southern and central Iowa in large and small tributaries of both the Mississippi and Missouri Rivers. Silver carp are found in the Missouri River, Big Sioux River, Mississippi River, Des Moines River as far upstream as the Red Rock dam, and Chariton River below Lake Rathbun. Large numbers of silver carp were observed throughout the spring and summer jumping below the Lake Red Rock and Lake Rathbun dams.



Iowa State University began a water quality and fisheries study for Clear Lake in 2007 that includes monitoring zebra mussel veliger and adult densities and distribution. The DNR-AIS Program provides \$10,000 annually for this 4-year project that is also supported by DNR lake restoration and water quality monitoring funds.

In FY10, the DNR-AIS purchased six trammel nets for three fisheries management stations to monitor the spread of Asian carp in Iowa rivers and reservoirs. The DNR-AIS also purchased a heated power washer for the last fisheries management station that did not have one to aid in cleaning boats and equipment to prevent the spread of AIS during daily operations. Additional equipment purchased included herbicide applicators for AIS treatments, filter bags for the Fairport Fish Hatchery to help prevent zebra mussels from entering the hatchery ponds, and SCUBA equipment for underwater monitoring and sampling of zebra mussels and other AIS.

**Table 8**

Aquatic Invasive Species Expenditures		
	FY06	FY10
Personnel	\$85,234	\$334,064
Travel Expenses	\$4,915	\$7,925
State Vehicle Operation and Depreciation	\$3,281	\$3,459*
Office Supplies	\$399	\$852
Facility Maintenance Supplies	\$26	\$10,841
Equipment Maintenance Supplies	\$2,936	\$8,006
Ag Supplies	\$42,751	\$48,148

	Other Supplies	\$100	\$7,671	
	Printing	\$477	\$1,299	
	Uniforms	\$455	\$248	
	Postage	\$536	\$22	
	Communications	\$651	\$775	
	Rentals	\$0	\$0	
	Professional Services	\$0	\$35,494	
	Outside Services	\$595	\$352	
	Advertising/Publishing	\$11,390	\$46,697	
	Reimbursement	\$0	\$24	
	Equipment	\$1,042	\$6,853	
	Indirects	\$9,768	\$41,475	
* \$18,386	Total	\$164,556	\$554,295	in vehicle

depreciation was credited back to the DNR-AIS budget in FY10.

## **Boating Navigation Enforcement and Water Safety Expenditures**

### **Conservation Officer Activities**

During the summer months, Conservation Officers around the state use a variety of enforcement techniques to keep our waterways safe for all ages.

Several group enforcement efforts on Iowa's 19,000 miles of interior rivers are conducted annually and known as river sweeps. This technique allows officers to start at a specific point and continue downstream contacting all recreationalists and educating everyone regarding all aspects of navigation.

### **BWI Enforcement**



Boating While Intoxicated (BWI) enforcement is a continual focus every year for Officers. Iowa participated in "Operation Dry Water" on June 26-27, 2010, a National campaign that saturated the waterways and airwaves with heightened enforcement and information on the effects and dangers of boating and drinking.

More than 50 officers participated in this two day event, contacting 1,112 boaters, performing safety equipment checks on

266 vessels and issuing 85 citations/warnings. Throughout the summer, a total of 26 BWI arrests were made by officers, working on additional coordinated BWI enforcement projects.

### **Flooding Across Iowa**

Conservation Officers spent many hours helping North Central Iowa after flooding occurred in early August. Officers assisted towns flooded by the Des Moines River, the Skunk, the Boone, Indian Creek, and Squaw Creek. Conservation Officers also helped in the town of Colo and in the city of Ames during those significant flooding events. Officers evacuated and rescued people, did welfare checks, transported medical supplies and personnel, helped sandbag, provided traffic control, patrolled, assisted in public relations, and clean-up efforts.



**Water Safety Contacts**

Annually, officers conduct navigation enforcement and water safety programs. A safety event is conducted with the Clear Lake Schools and third grade students to encourage the young students to be safe around water and the importance of wearing a life jacket. Every year over 110 kids meet with Conservation Officers in Cerro Gordo County and learn the importance of life jackets. “It won’t save a life, if it isn’t worn!”



**Table 9**

Law Enforcement Boating Activities	
Calendar Year*	Totals
<b>2006</b>	
Navigation Contacts	40,033
Navigation Citations	1,941
Special Events Patrolled	908
Accident Investigations	60
Boat Iowa Classes Taught	57
Boater Education Hours	3,150
Navigation Enforcement Hours	31,349
<b>2010</b>	
Navigation Contacts	16,021
Navigation Citations	1,378
Special Events Patrolled	176
Accident Investigations	53
Boat Iowa Classes Taught	20
Boater Education Hours	2664
Navigation Enforcement Hours	34,440

## **Full-Time Conservation Officers**

Full-time Conservation Officers spend twenty three percent of their time working on navigation related activities. The chart below lists navigation, boating and aquatic invasive species-related coded expenditures of full time officers.

**Table 10**

<b>Expenditures for Full-Time Officers</b>		
	<b>FY06</b>	<b>FY 10</b>
Personnel	*\$1,366,842	\$1,514,800
Officer Retirements	\$73,986	\$178,913
Vehicle Depreciation	\$240,916	\$201,711
In State Travel	\$54,495	\$22,334
Communications	\$30,509	\$31,411
Indirects	\$204,974	\$219,044
Totals	\$1,971,722	\$2,168,213

\*WPO base costs are included in year FY06. WPO increases are tracked separately in subsequent years in Table 11.

## **Seasonal Water Patrol Officers (WPO) Program**

The Department receives approximately 100 applications each year from potential candidates wanting to work for the Iowa DNR and be a part of the seasonal Water Patrol Officer (WPO) program. The WPO program has been in effect since the 1980s and allows individuals the opportunity to experience working for the Law Enforcement Bureau while performing on-the-water education and navigation enforcement for Iowa's waterways.

The seasonal Water Patrol Officers, serve as a "force multiplier" by assisting full-time officers in the enforcement of all fishing and navigation activities across Iowa. The Department is also able to hire quality candidates from the program as full-time officers. Currently almost half of our Conservation Officers started their careers as seasonal Water Patrol Officers.

The current average expenditures for an individual WPO is \$11,882. This dollar amount includes salaries, equipment, training, meals, lodging, and fuel for patrol boats and depreciation for vehicles.

**Table 11**

<b>Water Patrol Officer Expenditures Over Base Year</b>			
	FY05 Base Year	*FY06 Additional WPOs Over Base Year	FY10 Additional WPO's Over Base Year
WPOs	22	7	12
Salary		\$51,422	\$11,882
Equipment		\$1,844	
Meals & Lodging		\$6,369	
Training		\$2,917	
Fuel		\$31,838	
<b>TOTAL</b>		\$94,390	\$142,584

\* In May of 2006, the Department started 7 seasonal Water Patrol Officers in anticipation of the fee increase. Those 7 seasonal costs are counted as the FY07 increase over base in Table 3.

**DNR Patrol Boats**

The Law Enforcement Bureau divides the state into 5 districts and employs District Supervisors to manage each area. The supervisors determine specific needs when purchasing large patrol boats based on recreational opportunities, Water Patrol Officers and Law Enforcement Officers available in each district. The patrol boat models vary greatly by make, size, functionality, and cost, based on the need of the district, in order to provide quality navigation enforcement and boating education in each area. Officers use several different types of vessels for navigation enforcement and boating education.

The Department currently has approximately 36 large patrol boats used for navigation enforcement and boating education on Iowa's waterways. The additional revenues continue to enable these vessels to be replaced generally on a 3-5 year maximum schedule.

In Fiscal Year 2010 the Department purchased 2 large patrol boats at a cost of \$98,821.

**Table 12**

<b>Patrol Boat Expenditures</b>		
	FY06	FY10
228 Edgewater patrol boat		
242 Sportfish patrol boat		
1800 Pro V patrol boat		
1800 Pro V patrol boat		
220 Bay	\$43,285	

Tundra 21	\$21,897	
Stratos 386 XF patrol boat		
Ranger Reata		
Mako 212 Tracker		\$43,862
Mercury 250 Angler		\$54,959
TOTAL	\$65,182	\$98,821

### **Boater Education**

A Boating Education Coordinator was hired after the registration fee increase. Prior to the increase, the Department was unable to provide the staff and attention needed to advance the education program. The DNR relied heavily on other organizations and a handful of employees with a passion for boater education to deliver the program.



The Iowa DNR is now proactive regarding boater education, instead of playing catch up on important trends and safety issues.

**Table 13**

<b>Boater Education Expenditures</b>		
	<b>FY2006</b>	<b>FY2010</b>
Salary (Boater Education Coordinator)	\$0	\$76,527
State Vehicle Operation & Depreciation	\$0	\$15,531
Internet Fees	\$0	\$0
Replacement Computer		\$0
Office Supplies		\$415
“Kids Fest” Promotion		\$1,812
“Wear It Iowa” Promotion		\$520
“Be Dam Safe” Promotion		\$2,328
Ice Thickness Cards		\$0
Brochures	\$0	\$2,597
Educational DVDs		\$0
Clothing Allowance	\$0	\$313
Travel Expenses	\$0	\$2,423
Novelty Items With Boater Education Messages	\$0	\$3,588

Incentive Awards For Volunteer Instructors	\$0	\$0
LCD Projectors	\$0	\$0
Life Jackets*		\$0
TOTAL	\$0	\$106,054

\*The life jackets purchased in FY10 are represented under the “Kids Fest” Promotion.

Nationally, Boating Law Administrators and Education Coordinators focus on helping boaters understand and realize the importance of wearing life jackets. The Iowa Legislature, after 5 years of effort, passed a child safety law in 2008 requiring children under 13 to wear a PFD in a moving vessel.



In FY08 the education program created and distributed 500 “Wear It” signs to be placed at each boat ramp located in Iowa.

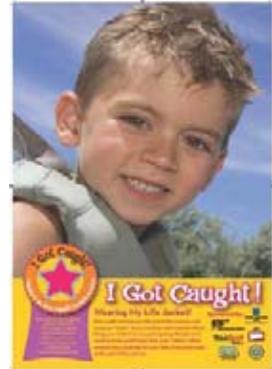
The 12 x 12 aluminum signs were given to state park personnel and Corps of Engineer facilities to attach the signs on or near the ramps. The Conservation Officers also worked with cities, towns and wildlife areas to ensure that those signs were placed at the remaining boat ramps throughout Iowa.



In FY 10 the Boating Education and Water Trails/Dam Safety programs focused the education effort towards “Low-Head Dams” and partnered with Polk County Conservation Board, Iowa Whitewater Coalition, Des Moines Fire Department, City of Des Moines, and Des Moines Park and Recreation Department. The goal was to educate registered boat owners, in the eight counties surrounding the City of Des Moines, on the dangers of low-head dams and the location of these dams. The year 2010 brought the beginning of a new 3 year

boat registration cycle and an opportunity for the Boater Education program to work with the County Recorders and provide important information to over 50,000 registered boat owners. Each registered boat owner was sent a renewal reminder postcard with a “Be Dam Safe, The Drop Can Be Deadly” sticker attached. When the individuals came into the Recorders Office to renew their boat or order a renewal on-line, they received a “Drowning Machine” brochure, an additional “Be Dam Safe, The Drop Can Be Deadly” sticker, placed on a registration decal holder, and an educational insert showing the location of 13 low-head dams. This multi-layered educational effort provided an important message regarding low-head dam safety to over 50,000 individuals.

Again in FY 10, the education program teamed up with Iowa Health Systems for the “I Got Caught” program, which rewards young people for being safe. The “I Got Caught!” program utilizes law enforcement to “catch” and reward young Iowans practicing good safety habits through helmet and life jacket use. The mission of the program is to prevent traumatic brain injuries on bicycles, scooters, skateboards, and rollerblades, and to promote PFD use. In FY09 the seasonal Water Patrol Officers, full time Conservation Officers and department Park Rangers gave out approximately 25,000 ice cream coupons to young people across the state under this program.



**Table 14**

<b>Boater Education Certificates</b>		
<b>Year</b>	<b>Students Certified</b>	<b># of Classes</b>
1999	681	14
2000	629	31
2001	349	13
2002	462	15
2003	1,711	19
2004	1,468	20
2005	1,088	22
2006	545	17
2007	2,298	29
2008	1,964	38
2009	1,642	79
2010	1,660	20

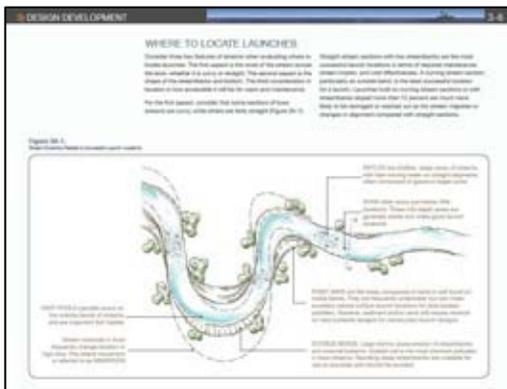
## Water Trails and Low-head Dam Public Hazard Program Expenditures

The Iowa DNR water trails and low-head dam public hazard program works statewide to ensure improved navigational safety on waterways throughout Iowa. This is achieved through public education and by developing consistently signed water trails, a warning signage system, navigation maps, accesses, and portage trails around dangerous dams. The Iowa DNR provides funds for and encourages local ownership of water trails throughout Iowa. It also provides technical assistance to communities working to find solutions at aging dams, and provides funds for mitigating dam problems, including safety hazards, fish passage, upstream flooding, and failure-related issues.

In numerous ways, fiscal year 2010 was a year of synthesis, planning, and prioritizing for the Iowa DNR water trails and low-head dam public hazard programs administered by the DNR rivers team.

### Planning

The Iowa General Assembly amended Chapter 464A to require the Department to create a low-head dam public hazard program, and to conduct a statewide planning effort for water trails and low-head dams to begin July 1 2008. The planning effort included multiple stakeholder surveys, signage plan development, a dam inventory, and a water trails development manual conducted jointly by Iowa DNR River Programs and the Iowa State University Department of Landscape Architecture.



*The water trails development manual contains guidelines on placement and construction of river launches, signage, and portages.*

A water trails statewide plan and an accompanying water trails development manual led by Iowa State University's landscape architecture department were released in June, 2010. The fully illustrated development manual provides technical, planning, and management tools for local water trails developers, and is the first comprehensive document of its kind in the nation. The plan itself helps water trails program staff prioritize limited resources while ensuring broader geographic representation. Throughout the year, a new signage system was established; implementation was required for all water trails that had not purchased signs. Signage improvements include a dam warning signage system that is scalable to the size of rivers, a statewide waterway mile marker system similar to interstate highways, and more consistent text and coloring throughout the system.

## Program results and projects

The program serves a growing segment of boat users – canoeists and kayakers, as well as more traditional recreational segments, including anglers and powerboaters. National statistics show that canoeists and kayakers have a higher rate of death per capita compared to other boaters.

Two brochures, “SmartStart for Safe Paddling” and “The Drowning Machine” continue to be disseminated to county recorders, boat rental facilities, paddling clubs, local governments, and field staff. This fiscal year, the water trails program completed a Lower Cedar River map and guide, its ninth “Expedition and Fishing Guide” for whole river systems. These maps contain angling information, dam, and boat launch locations. Printing is paid

for cooperatively with the fisheries bureau, and the brochure maps are being disseminated in cooperation with Iowa Welcome Centers, county conservation boards, state parks, and fish hatcheries.



*A mileage-based access numbering system provides consistency and reduces “sign clutter” along roadways.*

The Rivers’ team was also responsible for prioritizing \$800,000 appropriated for fiscal year 2010 to implement the water trails and low-head dam programs. Of that, \$436,524 was directly granted in local aid for low-head dam mitigations (\$363,476) and water trails (\$80,000). After a request for proposals, the Natural Resources Commission approved a \$210,000 contract with Conservation Corps Iowa to design, implement and construct new warning signage and portages at state-owned dams and coordinate with local communities for portage, access, and campsite construction. Several projects were in design phase by June 30, 2010, with the crew slated to begin in July. The program is established a niche in developing technical expertise in developing small, stable projects along rivers. The remaining \$153,476 was committed to materials, project support, and promotion.

In addition, \$955,000 under the I-Jobs program was appropriated for low-head dam mitigation. Of the total, \$305,000 was committed to local aid, and \$550,000 was committed to state managed dams at Klondike in Lyon County and Littleton in Buchanan County.

Water Trails and Dam Safety At A Glance		
	2006	2010
Total number of individual water trails with state designation, to date	0	13
Miles of water trails designated	0	430
Number of low-head dams with standard warning signage, to date	2	36
Dam-related deaths, calendar year	2	2
Number of maintained portage trails around low-head dams completed, to date	2	28
Number of low-head dams modified or removed for safety purposes, to date	0	1

The program is currently working on 930 miles of additional water trails under active development in 25 counties, in addition to the 249 miles already designated. Eight water trails with a total of 249 miles of routes have been completed and officially designated by the state.

**Staffing**

The River Programs Director is responsible for overall program direction, which in the current fiscal year involved statewide plan development, collaborating on river survey, assessment, and design work with DNR Engineering, and technical assistance provided to external dam owners. A construction technician continues to plan, develop, and maintain warning signage plans and portage trails, including launches and landings, around these dams. The construction technician also advises other communities on similar projects at their dams and on water trails for budget and conservation oriented access types known as “low impact” accesses. In some cases, Eagle Scouts and other volunteers have led the actual development of these projects. Two seasonal assistants worked to lay out plans, assist with mapping, conduct river assessment field work for dam-related projects, coordinate water trail designations, and install signage and construct portages. Half of one FTE’s time focuses on leading river survey and assessment work at low-head dams. The other half of this position focuses on the Protected Water Areas program, a land

*Water trail designation events like this one in Pottwattamie County appeal to a growing segment of outdoor interests and provide opportunities for introducing safety techniques.*



conservation program along rivers, and is not within the purview of this report.

Iowa DNR owns or manages seven major dams on navigable streams. As the DNR began encouraging other entities to develop warning signage and portages,

a responsibility emerged to provide adequate warning signage, constructed portages, and to maintain portages.

<b>Expenditures for Water Trails &amp; Dam Safety</b>		
	<b>FY06</b>	<b>FY10</b>
Personnel	\$7,572	\$112,400
Travel Expenses	\$1,038	\$1,727
State Vehicle Operation & Depreciation		\$5,781
Office Supplies		\$2,359
Facility Maintenance Supplies		\$8,895
Equipment Maintenance Supplies		\$2,544
Other Supply (training programs equipment, safety education & outreach materials)		\$9,251
Print and binding	\$1,800	\$4,895
Uniforms		\$1,142
Postage		\$0
Communications		\$2,504
Rentals		\$274
Outside services		\$734
Reimbursement & ITS Reimbursement		\$489
Equipment Inventoriable		\$4,870
Equipment Non Inventoriable		\$4,536
Indirects		\$15,770
<b>TOTAL</b>	<b>\$10,410</b>	<b>\$178,170</b>

**Additional program information**

One two-day canoe school was offered for naturalists and other agency staff to “train the trainers.” The number of classes was cut this year in response to flat operations budget with increased project work. This skills course responds to a need identified by agencies with canoe fleets that take groups on lakes and river. It provides consistent training for leading safe tours, developing risk management plans, and demonstrating appropriate canoeing skills. Two trainings for canoe liveries using the Professional Paddlesports Association training materials were held in the winter in order to promote safe, responsible enjoyment of streams and lakes.

- Dam warning signs benefit all river users, including anglers and powerboaters.
- Volunteers participate in projects including portage construction, dam-safety outreach, and canoe-campsite construction.

**Program outlook**

The fiscal year 2010 spent synthesizing, planning, and prioritizing will result in numerous projects being constructed in the fall of 2010 and spring / summer of 2011.

### Local Water Trails, Snapshot as of June 30, 2009

Designated	Under Development
1. North Raccoon River WT (Greene)	1. West Fork Des Moines River WT (Emmet)
2. North Raccoon River WT (Dallas)	2. Lizard Creek WT (Webster)
3. Des Moines River WT (Polk)	3. North Skunk River WT (Jasper)
4. Lower Des Moines River WT (Van Buren)	4. Upper Iowa River WT (Howard)
5. Boone River WT (Hamilton)	5. Upper Iowa River WT (Winneshiak)
6. Wapsipinicon River WT (Buchanan)	6. Upper Iowa River WT (Allamakee)
7. Cedar Valley Paddlers Trail (Blackhawk)	7. Yellow River WT (Allamakee)
8. Odessa WT (Louisa)	8. Maquoketa River WT (Jones)
9. Middle/South River WT (Guthrie)	9. Maquoketa River WT (Jackson)
10. Middle/South River WT (Dallas)	10. Iowa River WT (Johnson)
11. Iowa River WT (Hardin)	11. Iowa River WT (Louisa)
12. Wapsipinicon River WT (Clinton)	12. Turkey River WT (Fayette)
13. West Nishnabotna River WT (Pottawattamie)	13. Turkey River WT (Clayton)
	14. Grand River WT (Decatur)
	15. Cedar River WT (Blackhawk)
	16. Raccoon River WT (Sac)
	17. Raccoon River WT (Calhoun)
	18. Raccoon River WT (Carroll)
	19. Des Moines River WT (Boone)
	20. Des Moines River WT (Webster)

Hazard mitigation via removal or modification at several dams, including the lower dam in Charles City, the Vernon Springs Dam on the Turkey River, a dam/crossing on the Yellow River, the Klondike Dam in Lyon County, and the River Valley Park Dam in Ames, are all expected to either be removed and/or converted to rapids in 2010-2011. The statewide plan for low-head dams will be released in the winter of 2010.

More than 180 miles of water trails under development will be designated in FY2011. Before providing additional funds or other resources are committed for new water trails, action steps for 1) implementing the new statewide plan guidelines for signage and other water trail elements and 2) prioritizing future water trails, will be the initial focus.

## Boating Recreation Infrastructure Maintenance and Management

The Iowa DNR owns or manages infrastructure for boating recreation across the state. *This infrastructure is integral to safe boating and access to the waters.*



The Law Enforcement Bureau and the Fisheries Bureau do not typically manage land and do not have the staff for this type of maintenance and management. The Wildlife Bureau staff manages and maintains state fishing access areas, boat ramps and docks in cooperation with other bureaus. See the attached Addendum A for the listing of the safe boating access areas managed by the Wildlife Bureau staff. Boating populations, including paddlers, have increased over the years and there is an ever-growing demand for safe, convenient and appropriate boating access areas.

These areas are heavily used for access 9 months of the year, or even more depending on the weather. They require frequent maintenance, especially since most are along river corridors in flood plains. Maintenance and management includes re-rocking areas, cleaning silt from the boat ramps, custodial functions such as removing trash and debris and maintaining signage. In addition to the staff time of the actual work, drive time and driving expenses are included, as Wildlife Headquarters cover 4-6 counties and the areas are remote.

The attached listing of areas represents 182 accesses that qualify for federal boat access funds. There is a detailed federal process to obtain the funds through a formula, and rigorous federal audits on those funds to make sure the boat fees and federal funds are used for the purpose of maintaining safe boat access areas. There are between one and four access ramps for each of the sites that require maintenance. The total cost per access averages out to less than \$5,000 a year in maintenance. The cost of this program is leveraged **75% federal** with 25% boat registration fees.

**Table 18**

<b>Boat Fee Expenditures for Boating Infrastructure Maintenance &amp; Management</b> (Salaries for labor, contracted services, equipment, signage, publications, etc.)			
	<b>Federal</b>	<b>Boat Fees</b>	<b>Total</b>
FY06 (base year)	\$562,055	\$187,351	\$749,406
FY10	\$644,963	\$214,988	\$859,951

**NOTE: These federal funds can only be used for this purpose, and would be forfeit if not matched by boat fees.**

## Iowa's Marine Fuel Tax (MFT ) Program

The Iowa DNR Marine Fuel Tax program is not directly tied to the boat fee revenues and expenditures, but it is a complimentary program. MFT has played a vital role in providing recreational boaters new opportunities as well as maintaining public lakes used by boaters.



- **Revenue from the excise tax on the sale of motor fuel used in watercraft**  
The amount of revenue generated by the marine fuel tax legislation equals nine-tenths of one percent of the state excise tax on gas, minus 3% of the marine fuel tax total for administrative costs and minus the amount refunded to commercial fishers based on the gallons of fuel they used.
- **MFT funds are leveraged with a variety of sources including Federal Coast Guard, Corps of Engineers Section 1135, State of Iowa Parks and Institutional Roads Fund, and local city and county conservation funds.**
- **Annual MFT funding historically ranges from \$2.2 to \$2.7 million.** Funds are often “carried forward”, as they are connected with construction projects that might take multiple years to complete.
- **MFT funds are appropriated to the DNR to support and enhance recreational boating. Funded projects may include but are not limited to:**
  1. Dredging and renovation of lakes of this state.
  2. Acquisition, development, and maintenance of access to public boating waters.
  3. Development and maintenance of boating facilities and navigation aids.
  4. Administration, operation, and maintenance of recreational boating activities.
  5. Acquisition, development, and maintenance of recreational facilities associated with recreational boating.
- **Examples of MFT projects:**
  - ◆ Storm Lake (Buena Vista Co.) marina upgrade & expansion
  - ◆ Lynn Lorenzen Access (Cerro Gordo Co.) restroom and parking
  - ◆ Boat dock replacement (various counties)
  - ◆ Honey Creek Resort (Appanoose Co.) marina and boat ramp
- **DNR Water Recreation Access Cost-Share Program**
  - ◆ Around \$100,000 of MFT funds are available in the form of grants to local cities and counties for boat access facilities to lakes and streams.
  - ◆ Projects are funded 75% state to 25% local match
  - ◆ DNR receives grant requests for 15 to 30 projects and awards amounts usually between \$2,000 and \$50,000

Addendum B is the FY 2009 MFT expense report.

**Addendum A--Wildlife Bureau Management and  
Maintenance of Boating Accesses Areas**

Badger Creek Recreation Area 1
Badger Creek Recreation Area 2
Badger Lake
Barringer Slough Wildlife Area
Bartlett Access
Bel Aire Access & Outlet
Big Sioux River Complex
Black Hawk Wildlife Area
Blackhawk Bottoms
Blue Lake
Bluebird Access
Brighton Access
Browns Lake
Center Lake Complex
Christopherson Slough Complex
Clear Lake Wildlife Unit
Cliffland Access
Cone Marsh
Dakota City Access
Dan Green Slough
Deer Island Wildlife Area
Des Moines River Access
Dewey's Pasture Complex
Diamond Lake
Edgewater Beach
Elk Creek Marsh
Elk Lake Wetland Complex
English River Access
Eveland Access
Five Island Lake
Fogle Lake 1
Fogle Lake 2
Fogle Lake 3
Gitchie Manitou
Goose Lake
Grand River Wildlife Unit 1
Grand River Wildlife Unit 2
Great Lakes Wildlife Unit

Hales Slough
Hamburg – Mitchell Access
Hardfish Access
Hawthorn Wildlife Area
Ingham-High Wetland Complex
Iowa Lake 1
Iowa Lake 2
Iowa Lake Access 3
Kattleson Hogsback Complex
Klum Lake
Lake Cornelia Access
Lake Icaria
Lake Icaria Wildlife Area 1
Lake Icaria Wildlife Area 2
Lake Sugema 1
Lake Sugema 2
Little Clear Lake
Little River
Little Sioux Wildlife Area
Little Storm Lake
Lizard Lake
Lower Hamburg Bend
MacCoon Access
McKain Access
Meadow Lake 1
Meadow Lake 2
Miami Lake Access
Middle Decatur Bend
Mississippi River Islands
Missouri River Wildlife Unit
Morse Lake
Mount Ayr Wildlife Area 1
Mount Ayr Wildlife Area 2
Nishnabotna Wildlife Unit
Odessa Wildlife Area
Orleans Access
Pickerel Lake
Prairie Lakes Wildlife Unit
Rainbow Bend Access
Rand Access

Rathbun Wildlife Area
Rathbun Wildlife Unit
Red Cedar Access
Redwing Access
Rice Lake Wildlife Area
Riverton Wildlife Area
Rock Creek Island Preserve
Rock-Sioux Access
Round Lake Wildlife Area
Rubio Access
Rush Lake
Selma Access
Shidepoke Access
Silver Lake
Silver Lake Complex
Skunk River Access
Skunk River Wildlife Area
Snyder Bend
South Skunk River Access
South Twin Lake
Spirit Lake Access
Sugema Wildlife Unit
Tama Beach Access
Thayer Pond Recreation
Three Mile Lake
Three Mile Wildlife Area 1
Three Mile Wildlife Area 2
Tieville Bend
Turkey Run Access
Turtle Bend Wildlife Area
Tuttle Lake Wetland Complex
Twelve Mile Lake
Tyson Bend
Union Mills Access
Upper Decatur Bend
Virgin Lake
Washta Access
Weedland Access
West Fork Access
West Swan Lake

White Horse Access
Wiese Slough Wildlife Area
Williamson Pond
Willow Slough
Willows Access
Winnebago Bend 1
Winnebago Bend 2

**Addendum B—MFT 2010 Expenditure Report**

<b>Project Name</b>	<b>Federal</b>	<b>MFT</b>	<b>Other</b>	<b>Total Expense</b>
<b>Water Trails Program</b>		<b>\$94,929</b>		<b>\$94,929</b>
<b>Low Head Dam signage</b>		<b>\$2,959</b>	<b>\$11,900</b>	<b>\$14,859</b>
<b>Water Trails/Signage</b>		<b>\$68,014</b>		<b>\$68,014</b>
<b>Honey Creek Resort-Destination Park</b>		<b>\$163,280</b>		<b>\$163,280</b>
<b>Construction Services Transfer</b>		<b>\$188,929</b>		<b>\$188,929</b>
<b>County Cost Share Projects</b>		<b>\$54,961</b>		<b>\$54,961</b>
<b>County Cost Share Projects-CG cost shared</b>	<b>\$28,522</b>	<b>\$28,522</b>		<b>\$57,043</b>
<b>Casino Bay-Marina Improve. Phase I</b>	<b>\$7,824</b>	<b>\$7,824</b>		<b>\$15,647</b>
<b>MFT FEMA-FLOOD OF 08</b>		<b>\$29,312</b>		<b>\$29,312</b>
<b>Minor Projects-Cost Shared</b>	<b>\$38,082</b>	<b>\$38,082</b>		<b>\$76,164</b>
<b>Okoboji-Hwy 9 modern restroom</b>	<b>\$8,037</b>	<b>\$8,037</b>		<b>\$16,075</b>
<b>Emerson Bay Boat Ramp Restroom</b>	<b>\$108</b>	<b>\$108</b>		<b>\$215</b>
<b>Ventura/Lynn Lorenzen Restroom/Parking</b>	<b>\$50,327</b>	<b>\$50,327</b>		<b>\$100,655</b>
<b>Green Valley Ramp Restrooms (2)</b>	<b>\$18,509</b>	<b>\$18,509</b>		<b>\$37,019</b>
<b>Lake Macbride Ramp Restroom/Septic</b>	<b>\$1,365</b>	<b>\$1,365</b>		<b>\$2,731</b>
<b>Walnut Woods Pit Toilet-DM River Ramp</b>	<b>\$10,355</b>	<b>\$10,355</b>		<b>\$20,709</b>
<b>Badger Creek Ramp Restroom</b>	<b>\$11,052</b>	<b>\$11,052</b>		<b>\$22,103</b>
<b>Ramp &amp; Access Renovation General</b>		<b>\$3,961</b>		<b>\$3,961</b>
<b>Red Rock/Elk Rock Ramp &amp; Stalls</b>	<b>\$71,299</b>	<b>\$71,299</b>		<b>\$142,598</b>
<b>Lost Grove Lake non cost shared</b>		<b>\$118,444</b>		<b>\$118,444</b>
<b>Fisheries MFT Projects</b>		<b>\$52,605</b>		<b>\$52,605</b>
<b>Statewide Boat Access Docks</b>		<b>\$100,764</b>		<b>\$100,764</b>
<b>Total Marine Fuel Tax</b>	<b>\$245,479</b>	<b>\$1,123,636</b>	<b>\$11,900</b>	<b>\$1,381,015</b>

\*The remaining funds for the FY10 allocation of \$2,300,000 are under contract for the construction of Lost Grove Lake. Construction had commenced before the end of FY10 but no claims for work completed were paid out in that fiscal year.

## Addendum C--FISCAL YEAR 2009 EXECUTIVE SUMMARY

In 2005, in order to provide for continued outreach and resources to the citizens of Iowa, the Iowa General Assembly amended Iowa Code Chapter 462A.52 to increase boat registration fees for all types of watercraft, to change the registration cycle, and to begin requiring the Iowa Department of Natural Resources (DNR) to report on increased revenues and how they are expended until December 31, 2013. This is the third such annual report.

The increased fees are required to be used to control the spread of aquatic invasive species, the administration of enforcement of navigation laws and for water safety upon the inland waters of the state. The mandate required the Department to submit a report to the General Assembly by December 31 of each year beginning in 2007. (An extension for completing the 2009 report was requested until March 15, 2010.) It was directed that the report contain, but is not limited to, summarizing the activities of the Department on:

1. Administering and enforcing programs to control aquatic invasive species
2. Administering and enforcing navigation laws and water safety
3. Amount of revenues collected as a result of fee increases
4. Detail of how the revenues were expended
5. Amount and source of all other funds expended
6. Detail of how the funds were expended
7. The amount and source of other funds expended for the above purposes.

### Revenues: Comparisons and projections

When boat fees were increased in the 2005 legislative session, the registration period also was changed from two years to three years. For planning purposes, the Iowa Department of Natural Resources must now plan revenues over three years.

Table 1

Previous Revenues Under Two-year Registration Periods				
	FY03	FY04	FY05	FY06
Boat fees	\$2,563,493	\$372,481	\$2,611,295	\$387,908
Federal match	\$1,298,443	\$1,296,070	\$1,411,585	\$1,533,266
TOTAL REVENUES	\$3,861,936	\$1,668,551	\$4,022,880	\$1,921,174

Boat fees generated an average of \$1,483,794 per year (see Table 1) during the last four years of the two-year registration cycle. With fee increases and three years of actual record, boat fees average \$2,480,729 per year (see Table 2) under the three-year registration cycle.

Table 2

<b>Collected Revenues, FY2007 through FY 2009</b>				
	<b>FY 07 (Collected)</b>	<b>FY 08 (Collected)</b>	<b>FY 09 (Collected)</b>	<b>3-Year Collected Revenues</b>
Boat fees	\$6,229,611	\$812,672	\$399,906	\$7,442,189
Federal match	\$1,032,055	\$1,128,654	\$1,458,968	\$3,619,677
<b>TOTAL REVENUES</b>	<b>\$7,261,666</b>	<b>\$1,941,326</b>	<b>\$1,858,874</b>	<b>\$11,061,866</b>

With three years of record of annual actual increase in boat fees, the average increase of boat fees is \$996,935 in additional state revenue per year. A total of \$3,687,288 is available to expend per year in state and federal monies on boating related activities eligible to be funded from the boat registration fees. Federal funds include the safety and education portion and motorboat access portion from the Federal Aid in Sport Fish Restoration program, and Aquatic Invasive Species matching funds.

#### **Expenditures: Comparisons and Projections**

For the purposes of this report, the final year under the previous fee structure, fiscal year 2006, will be the baseline year to measure future years' expenditures. The state salary adjustment each year will be added to the baseline figure, so current programs remain sustainable. (Please note that past year expenditures have been corrected in FY06, FY07, FY08 and FY09.)

Table 3

<b>General Expenditure Categories</b>				
	<b>Base FY 06</b>	<b>FY 07</b>	<b>FY 08</b>	<b>FY 09</b>
Printing	\$60,274	\$232,429	\$68,658	\$26,262
Boat Safety	*\$2,036,904	**\$2,595,487	*\$2,803,457	*\$2,911,713
Boat infrastructure maintenance/mgt	\$749,406	\$777,505	\$904,831	\$887,303
Aquatic Invasive Species	\$164,556	\$333,818	\$578,522	\$525,517
Water Trails and Dam Safety	\$10,410	\$58,655	\$135,621	\$179,925
Boater Education	\$0	\$81,591	103,641	103,536
<b>TOTAL EXPENDITURES</b>	<b>\$3,021,550</b>	<b>\$4,148,185</b>	<b>\$4,594,730</b>	<b>\$4,634,256</b>

\*Includes the coded boating time of full time officers and the time of seasonal water patrol officers, and associated expenses. See Tables 10, 11 and 12.

\*\*In May of 2006, the Department started 7 seasonal Water Patrol Officers in anticipation of the fee increase. Those 7 seasonal costs are counted as the FY07 increase over base in this table. Because the state fiscal year starts July 1, the 7 WPOs are listed in FY06 in Table 11.

Table 4

<b>Expenditure Comparison to FY06 (baseline) to FY09</b>			
	<b>FY06</b>	<b>FY09</b>	<b>Increase over baseline year</b>
Aquatic Invasive Species program	\$164,556	\$525,517	\$360,961
<b>Expanded Enforcement &amp; Safety programs</b>			
Water Patrol Officers (temporary/seasonal)	*\$0	\$126,768	\$126,768
Patrol Boats	\$65,182	\$38,243	(\$26,939)
Boater Education program		103,536	\$103,536
Water Trails & Dam Public Hazard program	\$10,410	\$179,925	\$169,515
Enforcement and safety devoted to boating and navigation	\$1,971,722	\$2,746,702	\$774,980
**Boating recreation and safety infrastructure maintenance and management	\$749,405	\$887,303	\$221,825
Printing expenditures	\$60,274	\$26,262	(\$34,012)
<b>TOTAL</b>	<b>\$3,021,550</b>	<b>\$4,634,256</b>	<b>\$1,612,706</b>

\*Water patrol officers in FY06 were included in the “baseline enforcement and safety devoted to boating and navigation.” This report starts tracking WPO additions starting in FY07. Please see the note for Table 3.

\*\*Neither the Law Enforcement Bureau nor the Fisheries Bureau has land management or maintenance capacity. The Wildlife Bureau manages and maintains state motor boat access areas, boat ramps, and docks in cooperation with the other bureaus. Note that 75% of the total is Federal Aid in Sport Fish Motorboat Access funds.

Table 5

<b>Expenditure Comparison to FY06 (baseline) to FY07-FY09</b>				
<b>FY06</b>	<b>FY07</b>	<b>FY08</b>	<b>FY09</b>	<b>Totals</b>
\$3,021,550	\$4,148,185	\$4,594,730	\$4,634,256	<b>Expenditures</b>
	\$1,126,635	\$1,573,180	\$1,612,706	<b>Increase over baseline year</b>
	+\$129,700	+\$576,245	+\$615,771	<b>Comparison to \$996,935 average increase required by code</b>

Over the first three years of the increase authorized by the 2005 legislation, the department has spent over the target increase for boating safety and aquatic invasive species control by +\$1,321,716.

More detailed reporting of program-level expenses follow in this report.

*Lake Restoration  
2010 Report and 2011 Plan*

***Submitted To***

Joint Appropriations Subcommittee on Transportation,  
Infrastructure, and Capitals  
and  
Legislative Services Agency

***Submitted By***

Iowa Department of Natural Resources  
Patricia L. Boddy, Interim Director



December 30, 2010



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502 EAST 9th STREET / DES MOINES, IOWA 50319-0034

PHONE 515-281-5918 FAX 515-281-6794 [www.iowadnr.gov](http://www.iowadnr.gov)

## **Executive Summary**

The Department of Natural Resources (DNR) Lake Restoration Program (LRP) focuses on restoring impaired lakes to improve the quality of life for Iowans. Communities are rallying around their water resources as they seek population growth and economic success. Communities of the Iowa Great Lakes Region, Storm Lake, Creston and Clear Lake are obvious examples, but other communities including Carter Lake, Lake View and Brighton are identifying the importance of lakes for their futures as well.

Iowans value water quality and desire safe healthy lakes that provide a full complement of aesthetic, ecological and recreational benefits. A recently completed water-based recreational use survey by Iowa State University's Center for Agriculture and Rural Development (CARD) found that in 2009 there were 11,977,623 household trips to Iowa lakes, spending on the average \$49.60 per household on single day trips and \$262.96 per household on multiple day trips. This translates to six of ten Iowans visiting our lakes multiple times each year, spending \$1.6 billion per year, in their pursuit of outdoor lake recreation. The number of household trip visitations to Iowa lakes continues to increase; lake use in 2009 was 26.6% greater than visitation rates from 2002 through 2005. In addition, visitations at lakes that have completed watershed and lake improvements efforts continue to exceed state average and their own pre-renovation visitation levels.

In the 81<sup>st</sup> General Assembly, with HF 2782, the legislature responded to our need for improving Iowa's lakes by creating the Lake Restoration Plan and Report, known as the Lake Restoration Program. Included in HF2782, Section (26) of The Endowment for Iowa's Health Account is a process and criteria for completing successful lake restoration projects (Appendix A). It directs the IDNR to report annually its plans and recommendations for lake restoration funding, as well as progress and results from projects funded by this legislation. This report has been prepared in accordance with these requirements. In addition, it describes some of the important work done by local, state and federal partners. These partnerships, along with sound scientific information, are the foundation of current and future successful lake restoration projects.

### **Lake Restoration Program**

The Lake Restoration Program is modeled after the Federal Clean Lakes Program established in the 1970's.

- The DNR began by ranking 128 of Iowa's Significant Public Lakes (SPOLs) for lake restoration potential (see definition for SPOL - Appendix B).
- Ranking based on a 5-year Iowa State University (ISU)/IDNR assessment of water quality, technical feasibility of restoration, potential economic benefits, use by Iowans, and local support.

[Note: The following directives to the department regarding Project Goals, Process and Criteria, and Restoration Plan Guidelines are summarized from 2006 State Legislation (HF2782)]

### **Lake Restoration Program - Project Goals**

The department shall recommend funding for lake restoration projects that are designed to achieve the following goals:

- Ensure a cost effective, positive return on investment for the citizens of Iowa.
- Ensure local community commitment to lake and watershed protection.
- Ensure significant improvement in water clarity, safety, and quality of Iowa lakes.
- Provide for a sustainable, healthy, functioning lake system.
- Result in the removal of the lake from the impaired waters list.

## Lake Restoration Program - Process and Criteria

The process and criteria to recommend funding and for lake restoration projects, shall be as follows:

- The department shall develop an initial list of not more than thirty-five significant publicly owned lakes (Appendix C) to be considered for funding based on the feasibility of each lake for restoration and the use or potential use of the lake, if restored. The list included lake projects under active development that the department recommended be given priority for funding so long as progress toward completion of the projects remained consistent with the goals of the program.
- The department shall meet with representatives of communities where lakes on the initial list are located to provide an initial lake restoration assessment and to explain the process and criteria for receiving lake restoration funding.
- Communities with lakes not included on the initial list may petition the director of the department for a preliminary lake restoration assessment and explanation of the funding process and criteria.

## Lake Restoration Program - Restoration Plan Guidelines

The department shall work with representatives of each community to develop a joint lake restoration action plan.

- At a minimum, each joint action plan shall document the causes, sources, and magnitude of lake impairment, evaluate the feasibility of the lake and watershed restoration options, establish water quality goals and a schedule for attainment, assess the economic benefits of the project, identify the sources and amounts of any leveraged funds, and describe the community's commitment to the project, including local funding.
- The community's commitment to the project may include moneys to fund a lake diagnostic study and watershed assessment, including development of a TMDL (total maximum daily load) Water Quality Improvement Plan.

Each joint lake restoration plan shall comply with the following guidelines:

- Biologic controls will be utilized to the maximum extent, wherever possible.
- If proposed, dredging of the lake will be conducted to a **mean depth of at least ten feet** to gain water quality benefits unless a combination of biologic and structural controls is sufficient to assure water quality targets will be achieved at a shallower average water depth.
- The costs of lake restoration will include the maintenance costs of improvements to the lake.
- Delivery of phosphorous and sediment from the watershed will be controlled and in place before lake restoration begins.

In-lake, in conjunction with watershed management, will meet or exceed the following water quality targets:

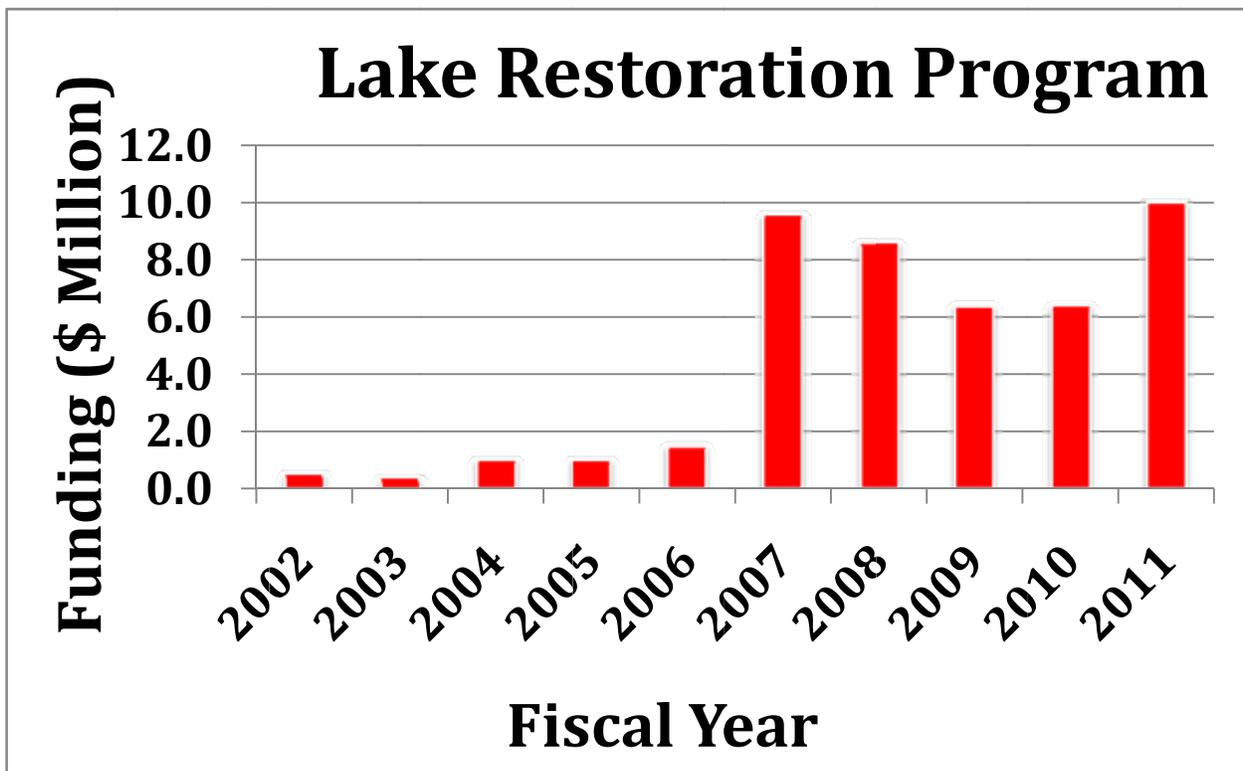
- Clarity. A four and one half foot secchi depth will be achieved fifty percent of the time from April 1 through September 30.
- Safety. Beaches will meet water quality standards for recreational use.
- Biota. A diverse, balanced, and sustainable aquatic community will be maintained.
- Sustainability. The water quality benefits of the restoration efforts will be sustained for at least fifty years.

The department shall evaluate the joint action plans and prioritize the plans based on the criteria required by the program.

### Lake Restoration Program - Funding

Funding from FY2007 through FY2011 of \$41 million (approximately \$8.2 million per year) has enabled the IDNR to improve several Iowa's lakes and proceed with implementing projects at a number of our other priority systems. However, the Lake Restoration Program has matured to the point where a number of multi-step projects are nearing the implementation phase; therefore, we now have more projects ready to start in a given year than we have available dollars.

Project planning involves working with representatives of the local community to develop a joint restoration plan. For planning purposes, it is necessary that a proper assessment of the lake and watershed is available to provide restoration alternatives to meet given water quality goals. In order to achieve lake restoration goals it is critical that the IDNR form effective watershed partnerships. This includes partnerships at the local and administrative levels of government. Local, state and federal programs offer a multitude of programs for financial assistance to landowners for soil conservation and other water quality protection practices. Building community support and development of partnerships is a long-term commitment from the lake restoration program and is the foundation to the program's success.



In addition, the majority of lake restoration projects involve construction phases of watershed or in-lake implementation. A typical construction project might include the following phases: project scoping, engineering design, work bid letting, contract development, construction, and inspection. All processes must adhere to the standards and requirements of doing business as a public agency. Certain projects may require easements or land acquisition before construction can begin and/or require approvals and permits such as an archeological investigation for historic properties,

an environmental review for threatened or endangered species, COE 404 permit, and DNR floodplains / sovereign lands permits.

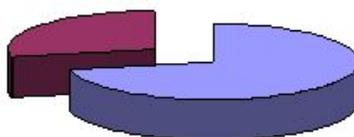
### **Estimated Restoration Costs for the Thirty-Five Priority Lakes/Watersheds**

The 2008 US EPA Watershed Survey supported an initial \$197 million dollar need by Iowa to address lake restoration efforts throughout the state. However, no additional federal dollars have been allocated to states for these types of projects. Depicted below is the DNR/ISU estimate for restoring 35 of our high priority Iowa Lakes.

## **Restoring our 35 High Priority Lakes**



**Watershed**  
**\$75,000,000**



**In-Lake**  
**\$190,000,000**

In FY2011, the source of funding for the Lake Restoration Program was an appropriation from the bond proceeds of the Revenue Bonds Capitols Funds. The LRP received \$10.0 million dollars to meet contracted obligations and FY2011 budgeted program activities. The legislature appropriated funding under SF2389, which specified \$2.0 million for Lost Grove Lake (Scott Co.), \$250,000 for Twin Ponds (Chickasaw Co.) and \$100,000 for Lake Delhi (Delaware Co.) Maintaining future funding and flexibility in where the Lake Restoration Program can allocate dollars will be a critical component to moving these multiple year projects forward and plan for new projects.

### **Lake Restoration Program - Status**

The intent of the program is to develop and administer lake restoration projects that achieve the following goals: ensure a cost-effective investment for the State of Iowa; foster a community commitment to lake and watershed protection; and provide significant improvement to the quality of Iowa lakes.

As indicated above, the department initially ranked 128 public lakes to prioritize lake restoration efforts. A group of thirty-five lakes, classified highest in priority for restoration, was established and served as a starting point for identifying potential lake restoration projects. An additional eleven lakes have either successfully petitioned or been added into the program. Major water quality improvement initiatives are completed or near completion at eight lakes. Current program activities are in progress at twenty-seven lakes throughout the state and either in the planning or initial community outreach stage at an additional eleven lakes (Figure 1).



Timelines for many of these projects usually fall within a two-year period. However, dredging or major construction projects may take even longer. Contractors face substantial costs to mobilize and set up lake dredging operations and this critical work needs multiple year commitments to secure contractors. As such, the most practical and efficient way to complete these undertakings are as continuous projects. The Lake Restoration Program has matured to the point where a

number of multi-step projects are nearing the implementation phase. Table 1 highlights major work activities planned for the remainder of FY2011 and FY2012.

## IDNR Lakes Restoration Program

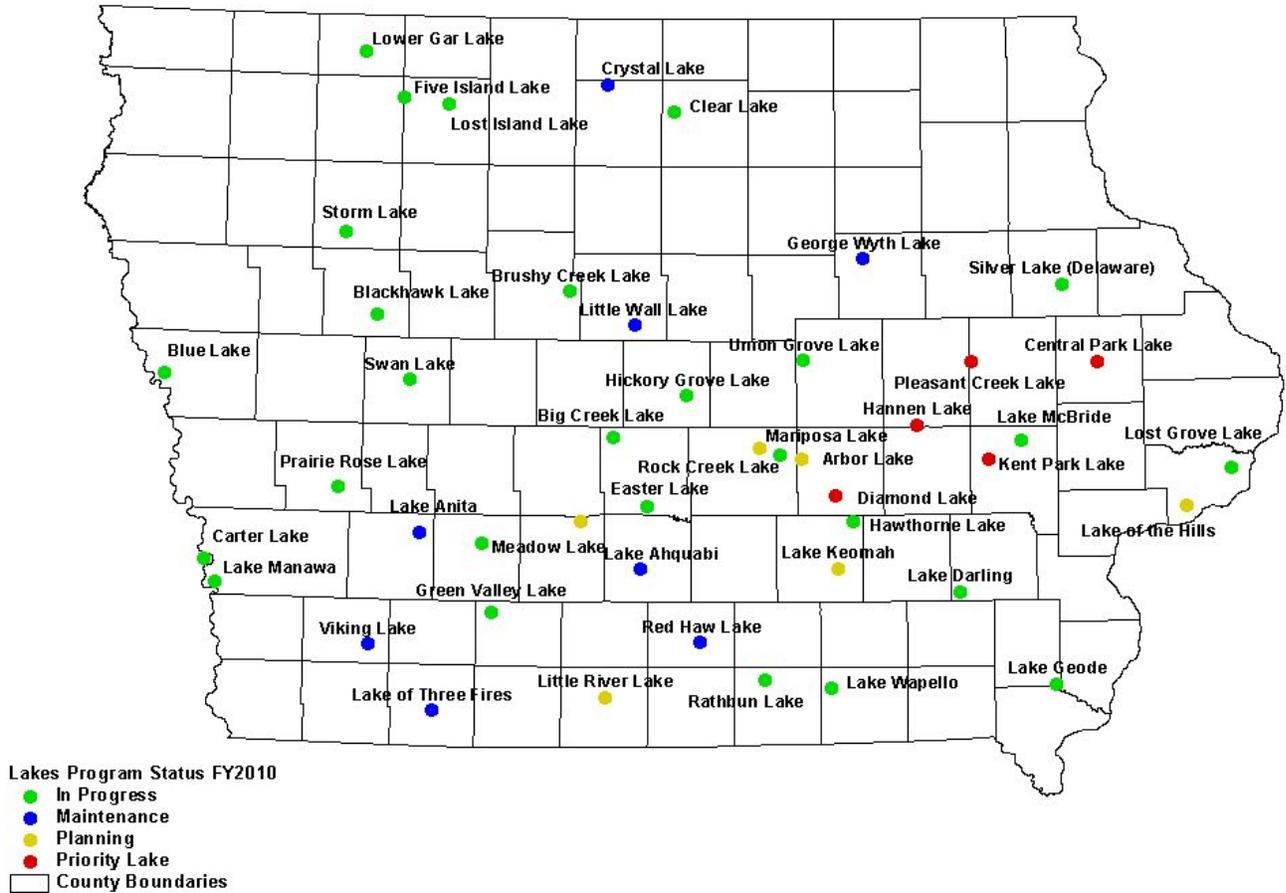


Figure 1. FY2010 Lake Restoration Program Project Status

Clear Lake, Green Valley Lake and Storm Lake are all examples of projects that currently have required a multiple-year funding commitment from the State in order to achieve lake restoration goals. Lake Restoration spent a significant portion of the FY09 and FY2010 budgets on the three, above mentioned, multi-phase projects. Final components to the Green Valley Lake restoration includes removal of approximately 250,000 yards of sediment targeted from both existing sediment retention basins and in-lake areas, added a silt dike within the lake and installing a water/sediment control structure on newly acquired state land. The DNR and local partner City of Storm Lake continued working toward their long-term sediment removal goals and restoration of Little Storm Lake. In addition, the contractor has completed dredging efforts at Clear Lake and construction has started on a Section 206 Aquatic Ecosystem project at the Ventura Marsh region of the Clear Lake system.

Tables 3 and 4 summarize current and planned expenditures for FY2011 and FY2012. A descriptive project summary by lake follows. The program continues to develop new projects and make contact with local communities about the lakes in their area prioritized for restoration. We continue to focus efforts on completion of projects where restoration efforts have already been initiated.

**Table 1. Work schedule for select multi-year lake restoration projects**

<b>Project Name</b>	<b>County</b>	<b>Projected Timeline</b>	<b>Project FY2010 and FY2011 Work Schedule</b>
Blackhawk Lake	Sac	2010 - 2015	Diagnostic / Feasibility (DF) study and TMDL reports completed Fall 2010. Public meeting to develop implementation plan. Local advisory committee will apply for a watershed improvement grant Spring 2011.
Carter Lake	Pottawattamie	2008 - 2012	Engineering and design for implementation plan being completed; partnership includes the States of Iowa and Nebraska and the cities of Omaha and Carter Lake; Phase I - watershed improvement projects, lake alum treatment and fish renovation completed in 2010.
Clear Lake	Cerro Gordo	2000 - 2011	Dredging completed fall of 2009; targeted removal of 2.4 million cubic yards of sediment; continued work in the watershed; Ventura Marsh restoration – partnership with Army COE, construction phase began Summer 2010
Easter Lake	Polk	2011 - 2015	Diagnostic Study will be completed spring 2010, including NRCS assessment of Yeader Creek. A public meeting will take place in spring of 2010 to inform the public of the results found during the surveys and studies and to develop a restoration plan.
Five Island Lake	Palo Alto	1990 - 2012	Continued support of local dredging project. DNR Lakes Program will work with local stakeholders to evaluate watershed/water quality improvement needs to compliment local dredging efforts
Green Valley Lake	Union	2008 - 2011	Silt removal and silt dike construction underway; construction scheduled for winter 2010 through spring 2011.
Lake Darling	Washington	2008 - 2012	Spillway repair/replace investigation completed; design for dam reconstruction completed; lake drained fall 2008; Dam construction, in-lake restoration (shoreline deepening, silt dike construction, fish renovation) and dredging will begin in November 2010 through November 2012; final watershed work on state property was completed fall 2010
Lake Manawa	Pottawattamie	2009 - 2014	DF study is completed; the DNR is exploring the option of utilizing dredge materials for future Iowa DOT highway projects. This will include an archeological survey followed by a pilot dredging project.
Prairie Rose Lake	Shelby	2011 - 2013	DF Study has been completed; the Shelby County Soil and Water Conservation District was awarded a \$510,611 Water Quality / Watershed Protection Project Grant and work is underway; completed an acquisition of a containment site; submitting requests for in-lake restoration efforts.
Rock Creek Lake	Jasper	2008 - 2015	Purchased containment site adjacent to lake; construction of five sediment control structures is scheduled for Spring 2011.
Storm Lake	Buena Vista	2000 - 2014	Continued support of local dredging project; locally sponsored WIRB Grant to improve Little Storm Lake water quality; five-year project completion plan was developed with local sponsors and will be implemented. Little Storm Lake restoration under contract with construction starting February 2011

**Table 2. Actual Budget: Fiscal Year 2010**

FY09 Carry Forward Funds (\$8,838,892) plus FY10 Appropriation (\$2,800,000)		FY2010 Budget	\$11,638,892		
Project Name	Description	FY10 DNR Spent	Federal	Other	Total Expense
Administration	Engineering/Project Management	\$453,033			\$453,033
Black Hawk Lake	Feasibility Study	\$52,235			\$52,235
Blue Lake	Feasibility Study	\$2,883			\$2,883
Clear Lake	Dredging/Carp study	\$1,274,193		\$250,000	\$1,524,193
Clear Lake	SEC 206 Ventura Marsh	\$634,732	\$2,177,244	\$250,000	\$3,061,976
Clear Lake	Grit Collection Chamber		\$34,790		\$34,790
Dam Safety	Signage	\$237,263			\$237,263
Feasibility Studies	Restoration Action Plans	\$397,603		\$21,746	\$419,349
Five Island	Dredging	\$200,000		\$200,000	\$400,000
Green Valley	Containment Site/Sediment removal	\$73,858			\$73,858
Hickory Grove	Feasibility Study	\$15,129			\$15,129
Lake Darling	Dam Construction/In-lake	\$114,476			\$114,476
Lake Darling	Watershed Improvement	\$33,341	\$100,023		\$133,364
Lake Manawa	Watershed Improvement	\$6,484			\$6,484
Lake Rathbun	SEC 1135 Shoreline Riprap	\$290,000	\$870,000		\$1,160,000
Lake Wapello	Watershed Improvement	\$51,914			\$51,914
Lake Wapello	Structures on Public Land	\$53,603	\$34,360		\$87,963
Lost Island	Fish Barrier/Water Control Structures	\$92,379			\$92,379
Meadow Lake	Watershed Improvement	\$15,417	\$46,250		\$61,667
Minor Projects	Minor Projects	\$120,197		\$15,000	\$135,197
Prairie Rose	Watershed Improvement	\$5,240			\$5,240
Shallow Lakes	Water Quality Improvement	\$46,987			\$46,987
Storm Lake	Dredging	\$408,358			\$408,358
Storm Lake	Little Storm Lake Restoration	\$29,460		\$29,460	\$58,920
<b>Total FY10</b>		<b>\$4,608,784</b>	<b>\$3,262,667</b>	<b>\$766,206</b>	<b>\$8,637,658</b>
<b>FY10 Carry Forward to FY2011</b>		<b>\$7,030,108</b>			

**Table 3. Budget: Fiscal Year 2011**

FY10 Carry Forward Funds (\$7,030,108) plus FY11 Appropriation (\$10,000,000)		FY2011 Budget	\$17,030,108				
Project Name	Description	FY11 DNR Budget	FY11 DNR Spent	DNR Under Contract / Obligated	Federal	Other	Total Budget
Administration	Engineering/Project Management	\$500,000	\$184,703	\$315,297			\$500,000
Black Hawk Lake	Feasibility Study/Watershed	\$175,000		\$175,000			\$175,000
Blue Lake	Feasibility Study	\$235,000	\$139,741	\$95,259			\$235,000
Carter Lake	Engineering/Design	\$355,717	\$355,717		\$961,116	\$2,195,736	\$3,512,569
Clear Lake	Dredging/Carp Study/Watershed	\$125,000	\$17,192	\$107,808			\$125,000
Clear Lake	SEC 206 Ventura Marsh	\$230,000	\$230,000		\$832,476		\$1,062,476
Clear Lake	McIntosh Woods Shoreline	\$100,000	\$100,000			\$10,000	\$110,000
Dam Safety	Signage	\$78,525	\$78,525				\$78,525
Easter Lake	Water Quality Improvement	\$50,000		\$50,000			\$50,000
Feasibility Studies	Restoration Action Plans/Monitoring	\$420,000	\$84,343	\$335,657			\$420,000
Five Island Lake	Dredging	\$200,000	\$200,000			\$200,000	\$400,000
Green Valley Lake	Sediment Removal	\$1,120,000	\$672,000	\$448,000			\$1,120,000
Hawthorn Lake	In-lake Restoration	\$300,000	\$300,000			\$246,907	\$546,907
Hickory Grove	Feasibility Study	\$150,000	\$33,429	\$116,571			\$150,000
IA Great Lakes	Watershed Protection	\$250,000	\$250,000			\$228,000	\$478,000
IJOBS	LRP Match - BMPs on Public Land	\$120,000		\$120,000			\$120,000
Lake Darling	Watershed Improvement	\$37,502	\$37,502		\$112,505		\$150,007
Lake Darling	Dam Construction/In-lake Restoration	\$5,000,000	\$1,700,860	\$3,299,140			\$5,000,000
Lake Delhi / Twin Ponds	Special Projects	\$350,000	\$250,000	\$100,000			\$350,000
Lake Manawa	Dredging/Watershed	\$1,545,000	\$33,456	\$1,511,544		\$1,500,000	\$3,045,000
Lake Wapello	Structures on Public Land	\$125,000	\$8,668	\$116,332			\$125,000
Lizard Lake	Spillway Repair/Fish Renovation	\$150,000	\$200	\$149,800			\$150,000
Lost Grove Lake	Dam Construction	\$2,000,000	\$1,271,354	\$728,646		\$2,218,641	\$4,218,641
Lost Island Lake	Fish barrier /Water Control Structures	\$650,000	\$650,000			\$180,000	\$830,000
Meadow Lake	Watershed Improvement	\$57,500	\$35,490	\$22,010	\$32,500		\$90,000
Minor Projects	Minor Projects	\$200,000	\$12,868	\$187,132			\$200,000
Prairie Rose	Containment Site	\$350,000	\$340,970	\$9,030		\$10,000	\$360,000
Prairie Rose	Watershed Structures	\$20,000		\$20,000	\$80,000		\$100,000
Rock Creek Lake	Watershed Structures	\$50,000		\$50,000	\$75,000		\$125,000
Shallow Lakes	Water Quality Improvement	\$125,000	\$19,316	\$105,684			\$125,000
Storm Lake	Dredging	\$1,322,524	\$616,138	\$706,386			\$1,322,524
Storm Lake	Little Storm Lake Restoration	\$638,340	\$638,340			\$156,020	\$794,360
<b>Total FY11</b>		<b>\$17,030,108</b>	<b>\$8,260,812</b>	<b>\$8,769,295</b>	<b>\$2,093,597</b>	<b>\$6,945,304</b>	<b>\$26,069,009</b>

**Table 4. Proposed Budget: Fiscal Year 2012**

<b>Project Name</b>	<b>Description</b>	<b>FY12 DNR Proposed Budget</b>	<b>Federal</b>	<b>Other</b>	<b>Total Budget</b>
Storm Lake	Little Storm Lake Restoration	\$200,000			\$200,000
Storm Lake	Dredging	\$1,000,000		\$100,000	\$1,100,000
Clear Lake	Dredging/Carp study/Watershed	\$50,000			\$50,000
Clear Lake	SEC 206 Ventura Marsh	\$50,000	\$192,110		\$242,110
Carter Lake	Engineering/Design	\$900,000	\$540,628	\$1,235,101	\$2,675,729
Administration	Engineering/Project Management	\$500,000			\$500,000
Five Island Lake	Dredging	\$200,000		\$200,000	\$400,000
Lake Darling	Dam Construction /In-lake Restoration	\$100,000			\$100,000
Lost Island Lake	Fish Barrier/Water Control Structures	\$150,000			\$150,000
Lake Manawa	Dredging/Watershed	\$1,825,000		\$1,825,000	\$3,650,000
Prairie Rose Lake	Sediment Removal/In-lake Restoration	\$1,500,000			\$1,500,000
Black Hawk Lake	Watershed Improvement	\$100,000		\$100,000	\$200,000
Easter Lake	Water Quality Improvement	\$25,000			\$25,000
Little River Lake	In-lake Restoration/Shoreline	\$1,500,000		\$423,900	\$1,923,900
IA Great Lakes	Watershed Protection	\$100,000		\$250,000	\$350,000
Feasibility Studies	Restoration Action Plans	\$200,000			\$200,000
Shallow Lakes	Water Quality Improvements	\$50,000		\$50,000	\$100,000
Minor Projects	Minor Projects	\$150,000			\$150,000
<b>Total</b>		<b>\$8,600,000</b>	<b>\$732,738</b>	<b>\$4,184,001</b>	<b>\$13,516,739</b>

## 2010 Report and 2011 Plan

### Lake Restoration Program (LRP) Highlighted Projects

#### Clear Lake (Cerro Gordo County)

Clear Lake is a 3,625-acre natural lake in Northwest Iowa. It has a watershed to lake area ratio of 2.3/1. In 2001, ISU completed a lake/watershed diagnostic/feasibility study. They presented a number of lake restoration options; specifically dredging of Little Clear Lake and restoration of Ventura Marsh.

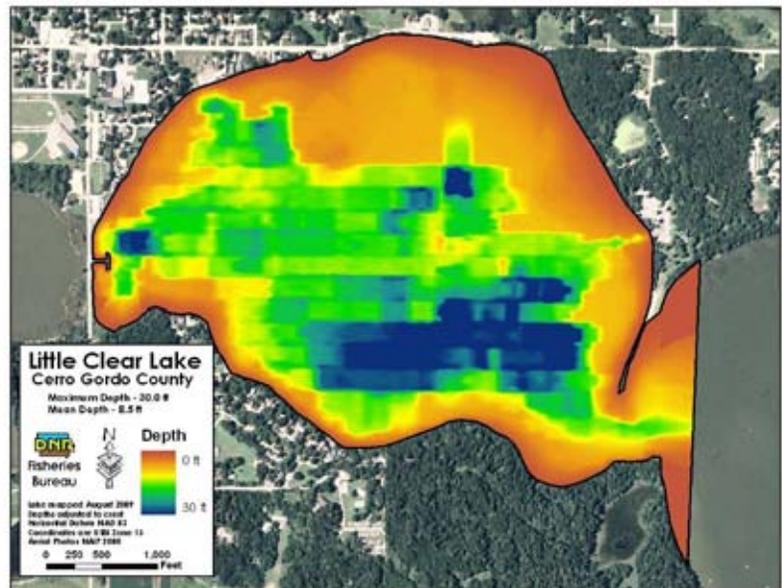
- The DNR and local sponsors purchased a 208-acre dredge spoil site with approximately \$660,000 of LRP funds and an additional \$660,000 local match. Contractors completed the \$886,000 containment site in spring of 2008.
- The estimated cost of dredging was \$8 million dollars (2.3 million cubic yards at \$3.50/cu. yd.). DNR had a January 2008 bid letting for the hydraulic dredging of the Little Lake portion of Clear Lake and awarded the low bidder, L.W. Mattensen of Burlington, Iowa, the \$6,453,000 contract (75% LRP and 25% local-match funding).
- Dredging commenced in late spring of 2008 and completed by late summer of 2009. Contractors removed a total of 2.4 million cu. yds.

#### **Little Clear Lake Pre-dredging**

(Maximum Depth: 11.9 ft,  
Mean Depth 4.3 ft)

#### **Little Clear Lake post-dredging**

(Maximum Depth: 30.0 ft,  
Mean Depth 8.5 ft)



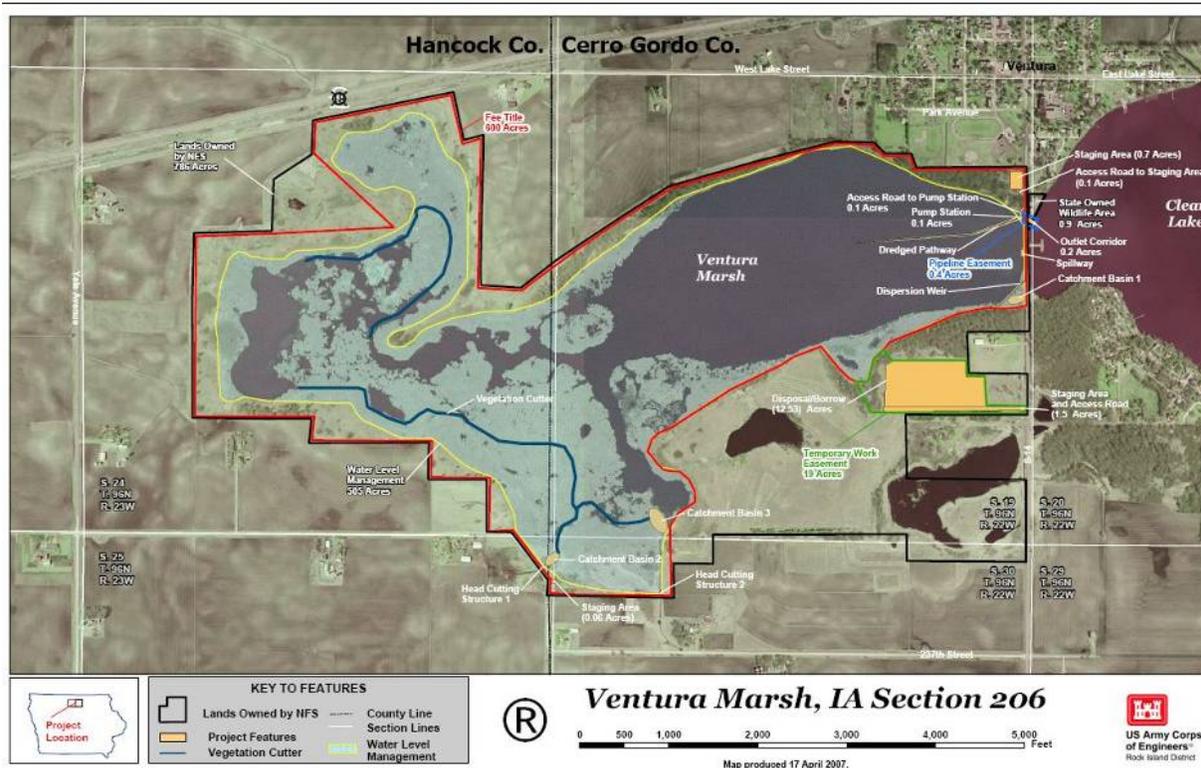
The recently dredged west end of Clear Lake has continued to show improved water quality when compared to pre-dredged conditions. The west end total phosphorus concentration has decreased from 77 ppb when dredging began in 2008 to 53 ppb in 2010 (a **31% reduction**). Likewise, total suspended solids have decreased from 27 ppm in 2008 to 12 ppm in 2010 (a **66% reduction**). Water clarity has increased from 1.8 feet in 2008 to 2.2 feet in 2010 (an **18% increase**). The west-end sampling site has shown better water quality than the other two sites on Clear Lake now that dredging has been completed. Prior to dredging, the west end site showed poorer water quality than the other two sites. Overall, the water quality of Clear Lake has shown substantial improvement over the past ten years that watershed and lake improvements have been implemented

## Section 206 U.S. Army Corps of Engineers Aquatic Ecosystem Restoration Project for Ventura Marsh



- Construction has started on a Section 206 U.S. Army Corps of Engineers Aquatic Ecosystem Restoration Project for Ventura Marsh, which flows into the west end of Clear Lake. In its present degraded state, the marsh serves as a major source of nutrients contributing to water quality problems in the lake and is a major reproduction area for common carp.
- The Army Corp of Engineers (COE) has \$3.2 million earmarked for a Ventura Marsh restoration project. Ventura Marsh state land and in-kind credits of \$840,000 and approximately \$884,062 in LRP dollars will fund the IDNR's portion of the marsh restoration project.

- The goal is to work with the COE in FY2010 and FY2011 to restore Ventura Marsh and gain water level management capabilities. This will allow for fish removal and revegetation of the marsh.
- The total cost of all above mentioned activities is approximately \$17 million. Of this amount, local and federal match represent 40% of the funds necessary to complete these restoration efforts.
- Work completed in 2010 includes a culvert placement under the S14 blacktop (Ventura Grade road) and pre-embankment loading for the pump location. The pump station, removal of old stop-log structure and fish trap, new stop-log structure, and limited dredging in Ventura Marsh will take place in 2011. The planned completion date is November 1, 2011.



**Ventura Marsh Section 206 Project Area**

## Anticipated Benefits

Restoration efforts and improvements in water quality have the potential to double the annual economic return that Clear Lake generates to the local economy. The Center for Agriculture and Rural Development at ISU has projected a significant benefit to cost ratio from lake and watershed restoration at Clear Lake. Restoration of Ventura Marsh will improve the water quality of Clear Lake and help keep the Carp population under control. Local groups and DNR Section 319 continue to pursue watershed projects that have the potential to decrease sediment delivery to Clear Lake. In addition, in FY2010 the DNR and Hancock SWCD will cost share on stabilization of critical shoreline areas at McIntosh Woods State Park.

## **Green Valley Lake (Union County)**

Green Valley Lake is a 390-acre lake constructed in 1950. It has a watershed to lake ratio of 11.3/1. The DNR implemented a limited lake restoration project through the State and U.S. EPA's Clean Lakes Program in the mid 1980s, however additional watershed and in-lake work was needed. Project partners initiated current restoration efforts at Green Valley Lake in 2006.

The local district soil group and NRCS have completed a watershed assessment and have developed a four-year plan to make needed watershed improvements. Cost share funding is now available for local landowners to accomplish soil and water quality improvement projects on their property. Iowa State University completed a Diagnostic Feasibility study in 2008 and presented a variety of restoration alternatives (i.e. spillway modification, fish restoration and dredging of coves) for consideration. A technical workgroup that includes IDNR staff, NRCS and SWCD staff, the City of Creston, Southern Iowa Rural Water, Green Valley Chemical and CIPCO meet to coordinate project activities.

DNR Parks is working in parallel with lake improvements efforts to complete a facelift to the park. Including, adding full hook-up sites, removing a number of campsites to increase the size of each site, redesigning all the camping pads, a new electrical system upgrading from 30 amps to 50 amps, and each site will have a new picnic tables and fire grills. The campground will have a new shower building installed this spring. DNR Parks added new pit latrines at the campground, the cabins and the north picnic area and built a third camping cabin. Green Valley will also have a new playground that was donated in part by the family of Greg Haley, who was the park manager when he passed away in January 2009, and built by volunteers. In addition, the park was connected to the City of Creston by a paved bike trail in 2009 that allows park visitors easy access to the amenities in town.

- The local NRCS District Conservationist has implemented a four-year, \$409,000, watershed improvement plan to complete approved soil and water quality improvement projects. To-date only \$18,000 is not committed to projects.
- Recent fish population estimates had supported the presence of high numbers of yellow bass and common carp, species both considered detrimental to sport fish populations, with common carp having the additional negative impact of contributing to poor water quality conditions. The DNR renovated the fishery in September 2008 and has since restocked the lake with bluegill, largemouth bass and channel catfish.
- The concrete spillway had starting to develop some structural problems and its design allowed common carp to enter the lake during high outflow periods. Iowa Bridge & Culvert LC completed a redesigned spillway in May 2009 at a cost of \$510,435.
- DNR awarded a \$348,767 contract to CL Carroll Company Inc. for in-lake fish habitat and protecting of the existing shoreline. Fish Habitat Stamp funds in cooperation with Federal Dingell-Johnson, Marine Fuel Tax and Lake Restoration Program funds paid for this aspect of the project.
- The Natural Resource Commission approved the acquisition of a parcel of land from LRP funding. The land is located 2.5 miles north of Creston, and adjacent to the northeast corner of Green Valley State Park. The Betty E. Gater Estate offered this 67.58-acre parcel for \$338,000. This site is serving as a storage area for sediments removed from the Green Valley Lake during the lake

restoration process. The DNR determined that over 30% of the phosphorus loading to the lake system comes from this portion of the watershed; therefore, we will construct a sediment control structure after completion of sediment removal activities.



- Taylor Construction & Excavation signed a contract in the fall of 2009 for removal of approximately 250,000 yards of sediment targeted from both existing sediment retention basins and in-lake areas. As of December 2010, the project is approximately 40% complete with a February 2011 completion date expected.

### Lake Darling (Washington County)

Lake Darling is a 267-acre man-made lake, constructed within a 1,400-acre state park, with a watershed to lake ratio of 46.5/1. Initially impounded in 1950, it has historically been a fair fishery plagued by severe in-lake siltation and poor water quality. Sedimentation has reduced the lakes original 305 surface acres to 267 acres. During the last five years, extensive watershed soil conservation work on state and private land has reduced sediment delivery to the lake by 60%.

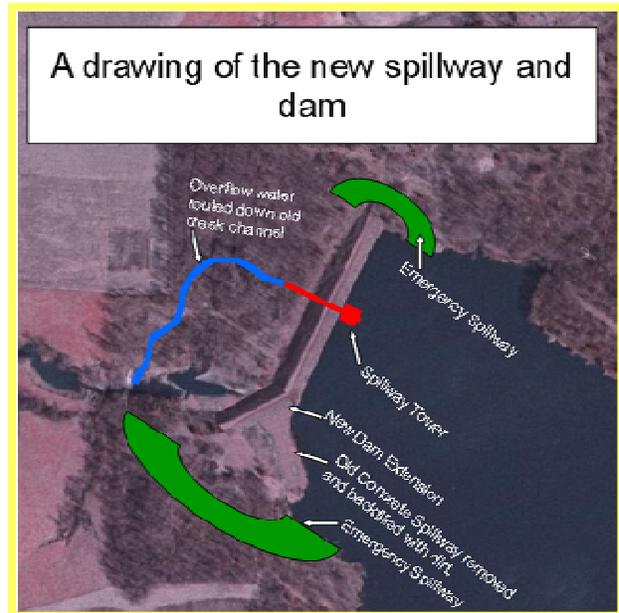
- The Management Plan includes all in-lake improvements to be done while the lake is drained and sustaining those improvements over the next 50 years. The Plan and its affects will benefit not only Lake Darling State Park but also the local community and economy.
- DNR held a public meeting in October 2010 at the Lake Darling State Park Lodge to discuss progress and obstacles encountered with the Lake Darling Restoration. We shared information with the public regarding permitting, archaeology, engineering design issues, status of Lakes Restoration Program funding and inclement weather's affect on the schedule.

#### **Lake Darling Estimated Restoration Project Costs**

Sediment removal (300,000 yd3)	\$1,800,000
Dam reconstruction & water level increase	\$1,700,000
In-lake silt dam construction	\$500,000
Ponds, terraces, risers, wetland (DNR/319/LRP)	\$386,000
Shoreline stabilization & jetty repair	\$215,000
Spoil retention dams	\$105,000
Handicap accessible jetty (REAP Land Management)	\$75,000
New campground boat ramp & lot (MFT)	\$30,000
	<b>Total = \$4.8 million dollars</b>

## Phase 1 – Dam and Spillway Renovation (Winter 2010 – Spring 2012)

- Acting on the recommendations of the completed engineering report, the IDNR will repair the dam and address spillway leakage.



- The NRC approved C.J. Moyna & Sons, Elkader, IA as the lowest bidder (\$1,700,809.58) for the Lake Darling dam & spillway repair on November 11, 2010. With the lake drained, DNR plans for in-lake restoration and spillway construction starting spring of 2011 with a tentative completion spring of 2012. In addition, the new spillway will increase the lake level by 2 feet.
- The Office of State Archeologists conducted archaeological surveys in areas potentially impacted by project construction activities. OSA completed all necessary archaeological work with the exception of a single site, which has valuable historical significance. Archaeologists are exploring this site further to insure they collect as much information as possible regarding past civilizations before restoration work moves forward.
- The DNR, SHPO and the USACOE signed a Memorandum of Agreement; this allowed data recovery work to commence. The DNR, SHPO and COE held an Archaeological Review Meeting in November 2010 at the SE Regional Office to assess the progress of ongoing survey work. This team informed the IDNR, USACE, and SHPO that their work was 50% complete and that a reasonable period for completion was the end of the year. The last phase of archaeological work was completed December 2010.

## Phase 2 - In-Lake Construction 2011 Construction

- Sediment Retention Basins / Sediment Removal / Shoreline Armoring
- Universally Accessible Fishing Pier



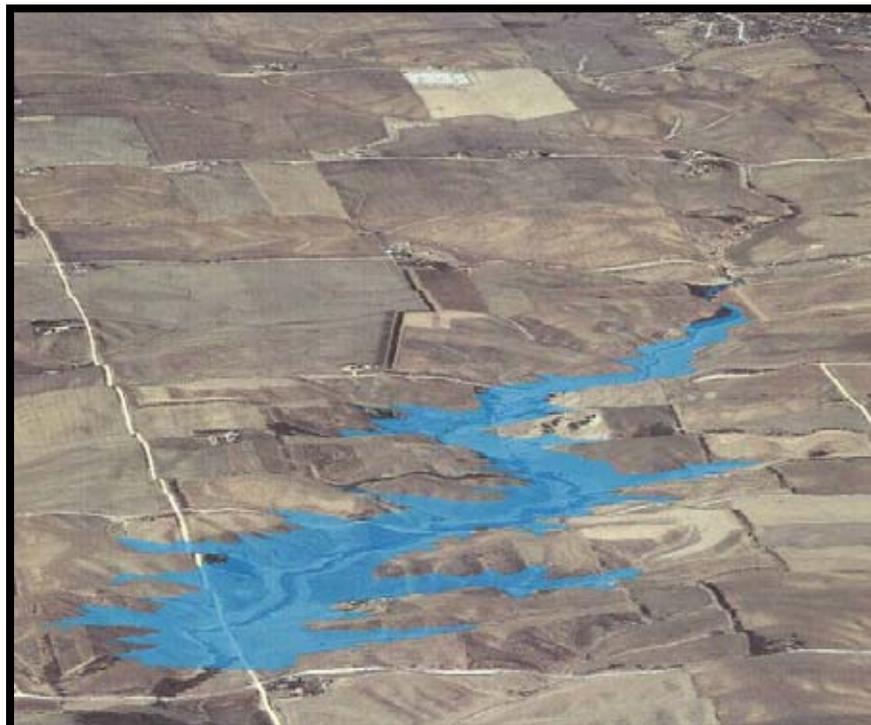
### Phase 3 – Boat Ramp and Parking Lot

- The DNR Fisheries Bureau and Engineering Bureau, has also been working on plans for the construction of a new boat ramp and parking area. DNR will construct the ramp and parking lot on the shoreline before the entrance of the existing campground and will replace the current campground boat ramp.

### **Lost Grove Lake (Scott County)**

The Iowa Department of Natural Resources has begun work to construct Lost Grove Lake, Scott County. The project is an investment in Iowa's infrastructure; promoting long-term economic growth; is a watershed/water quality project; and will provide flood protection and soil conservation benefits. The Lost Grove Lake recreation site was selected in 1987. Land acquisition from willing sellers began in 1988 and completed in 2003. The state purchased a total of 1,701 acres of land as the site for this 350 surface acre lake. This recreation project has strong local support from groups such as; the Quad City Conservation Alliance, Pheasants Forever, the Izzak Walton League, Scott County Soil and Watershed Conservation District and the Quad City Bass Club. In addition, the Scott County Soil and Watershed District completed a watershed assessment and implemented water quality projects that have included filter strips, grass waterways, sediment basins and EQUIP nutrient and pest management enrollments.

This lake site is located 10 miles north of Davenport, Iowa and will produce needed public fishing opportunities for the areas 400,000 residents. The lake and surrounding public land will also support outdoor activities such as hunting, wildlife viewing, boating and hiking. While a campground is not proposed at this time, local or county support could incorporate development of a campground site in the future.



- The Lost Grove Lake and Recreation Area project will provide 60 to 75 jobs during the construction phase. Iowa State University Center for Agriculture and Rural Development (CARD) research indicates that a lake of this size that exhibits good water quality will annually provide over 350,000 visits, create approximately \$20 million in local spending and will result in supporting 175 jobs.
- Project activities include dam construction, shoreline stabilization, boating and shore access, fish habitat enhancement and site access roads. Prior land acquisition, watershed improvements, utility

relocation, dam design and road modification funding expenditures have totaled \$4.495 million (Federal Sport Fish Restoration \$2.610M, DNR Fish and Wildlife Trust Fund \$1.00M, State Marine Fuel Tax Fund \$885,000).

- This project will provide a high quality recreational lake while at the same time providing immediate economic stimulus to the region and when completed will provide long-term economic benefits to the State of Iowa.

### Lost Grove Lake and Recreation Area Funding

	<b>Federal</b>	<b>State Match</b>
Project cost to date	\$2,610,000	\$1,885,000
Lake Restoration Program		\$2,000,000
State Marine Fuel Tax		\$1,875,000
Federal Coast Guard MFT	\$350,000	
Federal Sport Fish Restoration	\$2,475,000	
DNR Fish and Wildlife Trust Fund		\$150,000
State Parks and Institutional Roads Fund		\$300,000
Total Estimated Project Cost	\$5,435,000	\$6,210,000
<b>Grand Total Estimated Project Cost</b>	<b>\$11,645,000</b>	

- J.B. Holland Construction was the lowest bidder (\$4,158, 640.54) on the Lost Grove Lake dam construction project. The NRC approved the bid on June 10, 2010. Dam construction began in July 2010 and will take about two years to complete the dam/access construction.

### Storm Lake (Buena Vista County)

Storm Lake is a shallow natural lake (3rd largest natural lake in Iowa) with a surface acreage of 3,140 acres and a watershed to lake ratio of 4.5/1. Prior to the current dredging effort, IDNR last dredged Storm Lake in 1962. Lake depth maps developed in 1992 indicate that the 1962 dredging sites lost approximately 60% of their volume. Studies indicate that the majority of the sediment filled these areas was from in-lake dynamics with some contribution from the watershed.

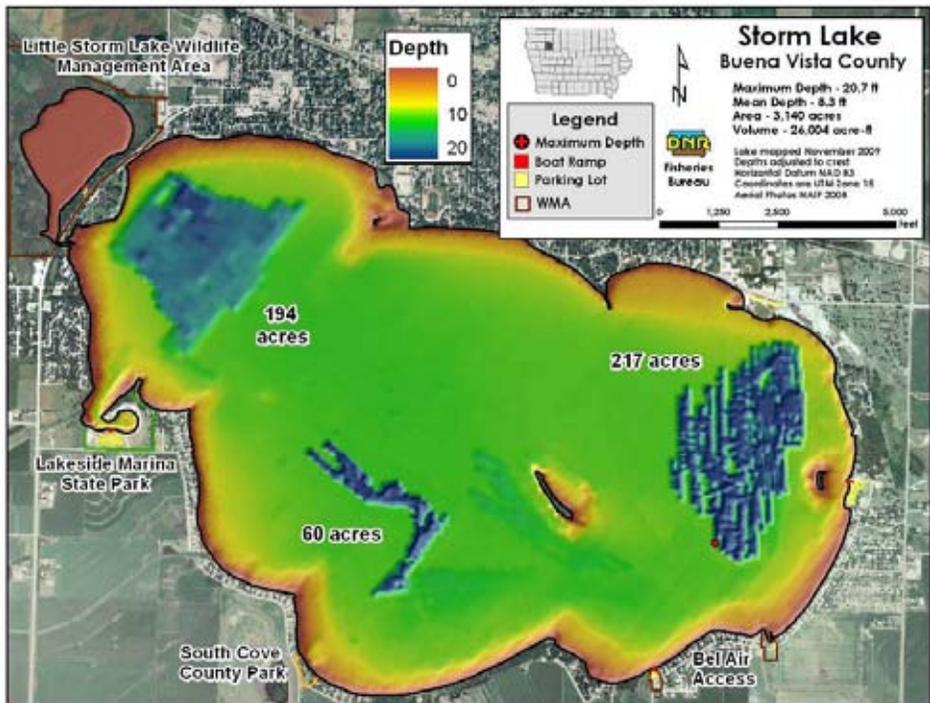
- DNR constructed a dredge spoil site at Storm Lake in 2001 and began dredging activities in 2001/2002. Lake dredging removed 1.32 million cu./yds. of sediment at a total project cost of approximately \$4.0 million during this first year of operation. Funding limitations restricted this initial dredging activity to 180-acres of the lake.
- The Lake Preservation Association (LPA) expressed a strong interest to continue dredging to achieve better water quality and from 2003 has along state partnership has dredged an additional 3,782,652 cubic yards from 2003 to present. The City of Storm Lake leased the original IDNR containment site and has since constructed a new containment site east of Storm Lake.

#### Funds contributed to the project

State allocation	\$8,650,000
Federal Allocation	\$1,765,000
City of Storm Lake	\$1,297,751 (Annually contributes a portion of Hotel/Motel Tax)
City of Lakeside	\$98,577 (Annually contributes a portion of Local Option Sales Tax)
Buena Vista County	\$680,000
Private Pledges	\$1,365,964
<b>Total</b>	<b>\$13,857,292</b>

- From 2002 to 2010, a total of \$13.86 million has been spent toward the restoration of Storm Lake
- Current data supports that past restoration efforts have resulted in improvements to the water quality of Storm Lake. Water clarity averaged 29 inches in 2010 opposed to an average clarity of 10 inches in 2004. There has also been a reduction in the average concentration of total phosphorus in the water column and the City continues to improve stormwater delivery to the lake.

Year	Days	Cubic Yards	Average clarity in inches
2002		1,320,000	
2003		50,000	
2004	136	699,112	10
2005	125	548,389	12
2006	138	573,225	14
2007	111	527,837	17
2008	69	244,450	19
2009	143	559,966	21
2010	156	579,673	29
<b>Totals</b>	<b>878</b>	<b>5,102,652</b>	



**From 2002 to 2009, the partnership at Storm Lake removed 5.1 million cu./yds. from over 500 acres of the lake**

Joint (DNR/Local) Five-year Project Completion Plan (2010 – 2014)

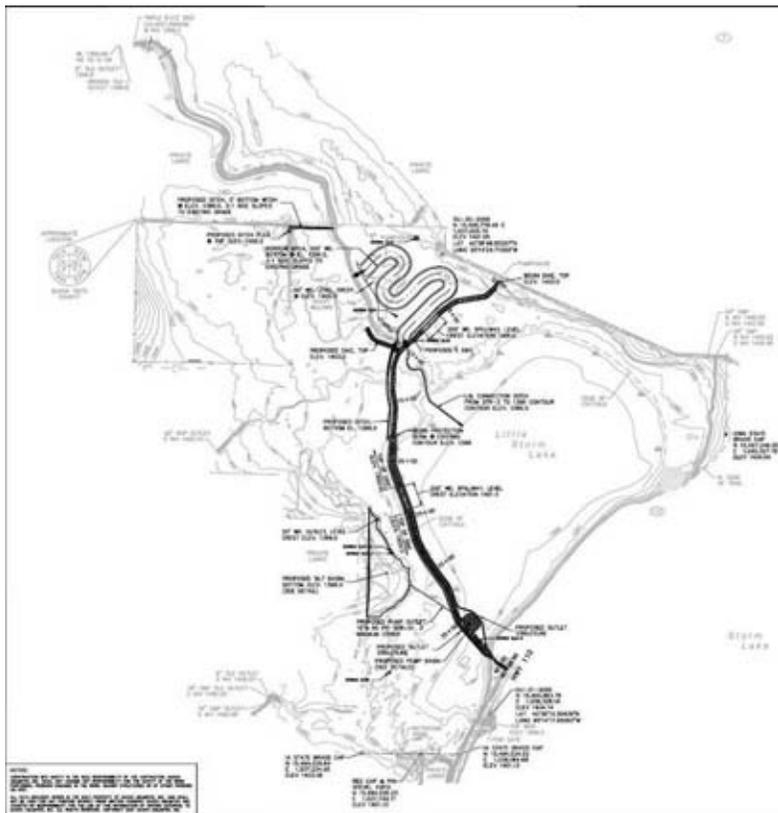
The current project goal includes a five-year plan. The plan includes dredging the lake for three years (2010 - 2012) with a goal of removing another 1.6 million cubic yards. The fourth year would focus on current work at Little Storm Lake, while allowing the spoil site to settle. The fifth year (2014) would involve the final year of dredging the lake. With the continued observed improvements in water quality, we should be able to maintain above the original water clarity goal of 28”.

- The project goal is to dredge an additional 2 million cu./yds. of sediment. This additional material can be placed within and will fill the current containment site
- To accomplish this goal will require an additional \$5 million in lake restoration funds and \$1.365 million of local match.

Little Storm Lake Ecosystem Restoration

Little Storm Lake is a 190-acre state-owned marsh that is an extension of Storm Lake (marsh and lake elevation is the same). The Lake Preservation Association (LPA) for Storm Lake applied and received a Watershed Improvement Review Board (WIRB) grant for \$200,000 to reduce the sediment and phosphorous transport from Little Storm Lake in to Storm Lake. The Lake Restoration Program will match the grant with an additional \$200,000.

- Approximately 70% of the water from the watershed flows through Little Storm Lake. Little Storm Lake originally had the ability to remove much of the sediment and nutrients from incoming waters. However, degradation has compromised proper wetland function. Under normal hydrologic conditions Little Storm Lake has the potential to function as a sediment trap for Storm Lake, but this capacity is overwhelmed during high flows. Little Storm Lake is at or near its sediment trapping capacity, which results in higher sediment transport into Storm Lake. Resuspension of sediments due to wind and other in-lake dynamics, such as rough fish, further exacerbate the total turbidity from suspended sediment and results in movement of sediment from Little Storm Lake into Storm Lake.
- This project includes a fish barrier and water retention structure between Little Storm Lake and Storm Lake and the construction of a pumping station and associated equipment. The project involves periodic dewatering of Little Storm Lake during years of favorable climatological conditions to consolidate the sediments and revegetate the area. Construction of the fish barrier would aid restoration efforts by preventing rough fish from destroying the vegetation and would decrease recruitment of rough fish by limiting their spawning area. In the future, if Little Storm Lake still does not provide adequate trapping capacity, a dredging project could be initiated to deepen the Little Lake to decrease sediment moving into Storm Lake.



- The work at Little Storm Lake is part of an overall effort to improve water quality in Storm Lake. Ducks Unlimited finalized engineering designs and presented the proposed work at a public meeting. Construction activities will include a long dike, three water control structures, fish barriers, pump installation, excavation, and construction of a retention pond. DNR had the bid letting December 2010 with construction to follow closely. Lessard Contracting (Sergeant Bluff, IA) submitted the low bid for the project in the amount of \$789,245.

#### Anticipated Benefits

- This aggressive dredging goal, coupled with watershed improvements and restoration of Little Storm Lake and wetland will result in significant improvements in water quality. We anticipate being able to maintain an average summer water clarity of 30 inches (**a 300% improvement in water clarity since inception of the project**) by 2015.
- In addition, lake restoration efforts so far have encouraged a \$35 million economic development named “Project AWAYSIS” that has the potential to create 690 new jobs and over \$28 million in new spending in Storm Lake and Buena Vista County.
- Completion of the Casino Bay Marina with \$3 million dollars of State of Iowa funds which allow better access and a full service boat dealership on the lake.

## Lake Restoration Program (LRP) – Projects In Progress

### Big Creek Lake (Polk County)

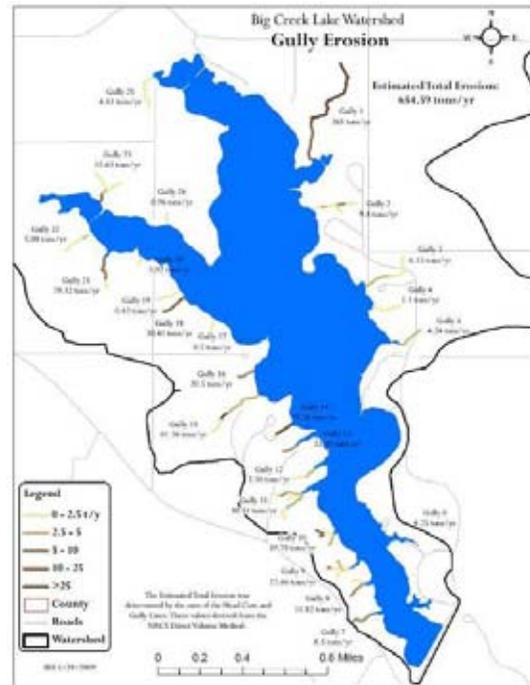
Big Creek State Park/Lake is a major recreational destination for the citizens of Iowa. Over 350,000 visitors travel to Big Creek each year and they annually generate over \$19 million in spending. Improving the lakes water quality through watershed improvements is critical to maintaining and even increasing recreational use levels.

Big Creek Lake is currently listed on the EPA 303d list for bacteria and historically has been listed for sediments and nutrients. A comprehensive review of the watershed indicates that the watershed annually delivers approximately 6,379 tons of sediment and 8,280 pounds of phosphorus to the lake. We must significantly reduce these numbers to preserve the lake’s water quality and extend the lifespan of the lake. Additionally, we must also reduce waste products from humans and animals within the watershed that adversely affect water quality.

- A 2007 development grant provided analyses of the Big Creek watershed. In addition, a 2008 gully analysis and 2009 land use analysis provided a better understanding of critical areas in the watershed.
- Watershed assessment identified several gullies with severe erosion on State property. DNR Engineering is taking a more detailed look at the top 10 of 25 problem gullies, since they estimated that these 10 areas accounted for the majority of sediment delivery to Big Creek. The plan over winter 2010/2011 is to determine the best location for structures, survey and provide design concepts to us so that DNR can determine the potential areas affected by construction activities; including, construction access and staging areas. We will then use this information for the environmental and archeological review of these sites. Once we have approved locations for the structures we will request that engineering proceed with final design and bid letting for construction.



- A DNR Wildlife Specialist continues to work with landowners in the Big Creek watershed to implement conservation programs, such as WRP CRP on their properties to reduce sediment and nutrient input into Big Creek. The DNR Lake Restoration Program is working in cooperation the Department of Agriculture and Land Stewardship for project management, to address stream bank erosion and/or livestock exclusion to provide additional Conservation Reserve Program incentives to landowners within the watershed.
- The Iowa DNR Watershed Improvement Section completed a Water Quality Improvement Plan in September 2010 and in March 2010 contracted the Iowa Department of Agriculture and Land Stewardship to provide Polk SWCD and Boone SWCD with funding to complete a Watershed Management Plan. The EPA approved the Big Creek Watershed Project for \$292,834 over the year duration of the project.



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### Blackhawk Lake (Sac County)

Blackhawk Lake is the southern most natural lake in Iowa located in Sac County, Iowa, near the town of Lake View. This 922-acre lake has a watershed of 14,097 acres. Data from the Iowa Department of Natural Resources indicate that the lake currently has an average depth of 5.15 feet. Water clarity is predominantly in the range of 0.5-1 ½ feet, with phosphorus levels consistently 100-200 ppb. Very poor lake transparency due to turbidity and frequent algae blooms due to high phosphorus levels are common in the past few years. In addition, the state beach portion of the lake on the 30 Acres Campground shore was closed once in 2004 and 2007, both due to high E. coli.



- Local leadership in cooperation with the DNR and ISU Extension formed a local steering committee (Watershed Action Group). This group includes members of the community and watershed, as well as members from various state and local agencies (e.g. ISU Extension, ISU Agronomist, Sac SWCD, Carroll NRCS, Sac Board of Supervisors, Watershed residents/landowners/farmers, Iowa DNR, City of Lake View, Sac NRCS, City of Breda City Clerk, and Carroll SWCD).
- This committee locally raised \$40,000 to help fund the Diagnostic / Feasibility Study; the goal of the study is to provide restoration alternatives to the DNR and local community; DNR contracted with Iowa State University (ISU) for the D/F study, which they completed in fall of 2010.
- DNR Fisheries has given several tours to DNR employees and ISU personnel of the Black Hawk Lake watershed. They conducted a tour of the lake shoreline to map tile and storm sewer inlets to the lake and identified locations in need of best management practices.

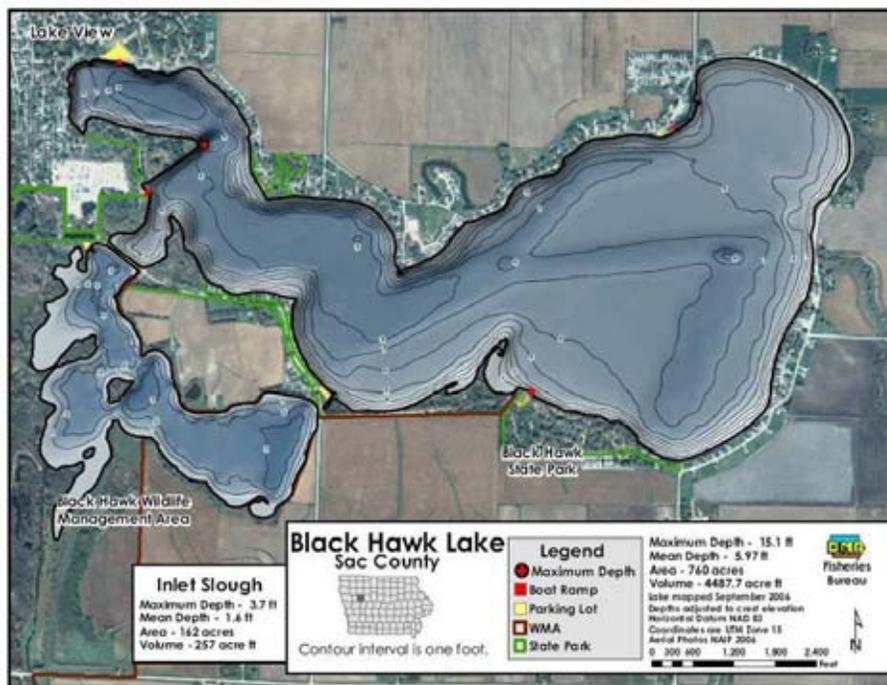
- IDALS provided planning assistance to help accurately identify existing problems and issues critical to achieve desired resource management objectives and to help local leaders inventory, assess, and develop strategies to address watershed problems.
- DNR Watershed Improvement Section completed Water Quality Improvement Plan to address the 303d listed of Blackhawk Lake. Algae and turbidity impairment continue; the bacteria impairment is new for the 2008 cycle. DNR will schedule a public meeting in January 2011 to present findings and receive comment.

### **Black Hawk Lake (Sac Co.) Bathymetric Map**

Main Lake Area: 760 acres  
 Main Lake Mean Depth: 5.97 ft  
 Main Lake Max Depth: 15.1 ft  
 Main Lake Volume 4,488 ac-ft

Inlet Lake Area: 162 acres  
 Inlet Mean Depth: 1.6 ft  
 Inlet Max Depth: 3.7 ft  
 Inlet Lake Volume: 257 ac-ft

Total Volume: 4,745 ac-ft  
 Total Area: 922 acres  
 Mean Depth: 5.15 ft  
 Max Depth: 15.1 ft



- The watershed action group has met a few times to discuss the project and is currently reviewing restoration alternatives and developing a plan of action. DNR provided funding to the SWCD to take information gathered in the Watershed Assessment, Diagnostic Study and Water Quality Improvement to development of a Watershed Management Plan. This will allow the local group the ability to apply for project implementation dollars for work in the watershed.
- Project partners are also exploring the potential of several CREP sites as part of the Mississippi River Basin Initiative. The Natural Resources Conservation Service has established the Mississippi River Basin Healthy Watersheds Initiative (MRBI) to improve the health of the Mississippi River Basin, including water quality, wetland restoration, and wildlife habitat. Through this Initiative, NRCS and its partners will help producers in targeted watersheds within the Mississippi River Basin voluntarily implement conservation practices that avoid, control, and trap nutrient runoff while maintaining agricultural productivity.

### **Blue Lake (Monona County)**

Blue Lake is a Missouri River oxbow lake located in western Monona County three miles west of Onawa and three miles east of the Missouri River. The lake was an active channel of the Missouri River in 1804 when the Lewis and Clark expedition went through the area. The lake shoreline is now part of Lewis and Clark State Park. Excessive growth of algae, a lack of clarity caused by this algal growth, and non-algal turbidity are the impairments at Blue Lake. These problems combine to reduce the recreational use of the lake.

- DNR completed a Water Quality Improvement Plan for Blue Lake in 2008 and held a public meeting to discuss the findings of the study.
- DNR held a public meeting in 2009 to present the lake assessment and restoration process and develop a local technical advisory team of conservation agencies and local stakeholders to help guide the project. The group met periodically during the year. Objectives of the project are to reduce nutrient and sediment inputs from the watershed, reduce re-suspension/recycling of in-lake nutrient and sediments, eliminate rough fish introductions and evaluate lake and water table interactions.



- DNR has altered the waterfowl refuge boundary to exclude Blue Lake and address excess nutrient inputs from geese.
- Lake Restoration contracted with MSA Professional Services to conduct a diagnostic-feasibility study on the lake. Extensive data collection occurred throughout 2010 and MSA, in cooperation with the Technical Advisory Team, is developing alternatives to address project objectives. Project leaders will plan a public for early 2011 to discuss potential restoration efforts with the community.

### **Brushy Creek Lake (Webster County)**

Current project activity entails the construction of sediment control structures at 13 sites (estimated reduction in sediment delivery of 300 tons/year) surrounding the lake at Brushy Creek State Recreation Area. These structures, commonly referred to as terraces, are earthen dikes and control structures made of pipe and culvert material that are built at the head of gullies and valleys where erosion has occurred in the past and where sediment is entering the lake proper. The NRCS designed structures for this project and the funding source is Federal EPA and Lake Restoration Program. The NRC approved the bid from Carnarvon Sand and Gravel at a cost of \$64,618.00.

### **Carter Lake (Pottawattamie County)**

Carter Lake is a natural lake that is uniquely located in both Iowa and Nebraska. Carter Lake is an old oxbow of the Missouri River that was isolated from the river main channel in 1877. The lake is approximately 300 surface acres at conservation surface pool elevation 970.0 feet, with a watershed area of 2,675 acres (watershed area to lake area ratio of 7.6/1). The lake is approximately 75% in Nebraska and 25% in Iowa. Park areas in Nebraska and the City of Carter Lake in Iowa dominate land use adjacent to the lake. Problems at the lake have centered on poor water quality, chronic low water

levels and nuisance algae bloom. Impairments include nutrients/algae, indicator bacteria, and fish contaminants (PCBs).

- Carter Lake is a highly productive lake that exhibits poor water clarity, high nutrient concentrations, frequent algal blooms, and periodically high bacteria. Given the nature of the problems at Carter Lake, corrective measures focused on the reduction of phosphorus, which is the driving force behind algal production. The goals pertain to protecting aquatic life and public uses of the lake such as recreation, fish consumption, and aesthetics.
- Restoration of Carter Lake involves the cooperation of Iowa, Nebraska and the cities of Omaha and Carter Lake. A local Iowa group, the Carter Lake Preservation Society (CLPS), has been very active in moving this project forward.
- In 2006, the cities of Carter Lake, Iowa and Omaha, Nebraska, requested assistance from environmental agencies in addressing water quality problems at Carter Lake. The Carter Lake Environmental Assessment and Rehabilitation (CLEAR) Council, with assistance from numerous local and state agencies, developed a conceptual plan to address water quality concerns. The community led steering committee finalized the Carter Lake Water Quality Management Plan in the spring of 2008.



- The IDNR, the City of Carter Lake and the City of Omaha have an agreement to develop a well on City of Omaha property that will connect to an existing infrastructure of pipes that lead to Carter Lake. The City will use the well to maintain Carter Lake at a full pool range. The DNR agreed to pay the cost of the Recharge Well System. The City of Carter Lake and City of Omaha have met their match requirements for this Recharge Well System through in-kind contribution and the City of Carter Lake will coordinate the project.
- The Iowa Legislature provided \$1,000,000 in funds for the well recharge system and water quality improvement projects at Carter Lake.
- Fall 2008, the Metro Area Planning Agency (MAPA), with support of project partners, selected Tetra Tech, Inc. for the purpose of preliminary design and engineering of critical components of the Water Quality Management Plan for Carter Lake. Their work will focus on the restoration alternatives of water-budget/seepage management, dredging, and stormwater/in-lake alum treatment. By winter of 2009 project partners will have enough information on probable cost, effectiveness and permitting issues to determine how to best move forward with implementation.



**Carter Lake Restoration Project Budget**

**Estimated Cost**

**IN-LAKE**

Alum Treatment	\$1,530,000
Sediment Core Study	\$39,000
Fish Renovation	\$200,000
Targeted Dredging	\$279,300
Watercraft Management	\$87,994
<b>SUB-TOTAL</b>	<b>\$2,136,294</b>

**IN-LAKE (watershed interception)**

Wetland Creation / Enhancement / Forebays	\$2,019,000
Shoreline Stabilization	\$899,000
<b>SUB-TOTAL</b>	<b>\$2,918,000</b>

**WATERSHED**

Bio Swales / Wet Detention Basins / Vegetated Buffers	<b>\$794,300</b>
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**ENGINEERING**

Final Alternatives Analysis	\$319,000
Final Design / Permitting / Construction Review	\$647,104
<b>SUB-TOTAL</b>	<b>\$966,104</b>

**WATER SOURCE**

Well Construction / Supply Line Modification	\$425,085
Final Design	\$74,915
<b>SUB-TOTAL</b>	<b>\$500,000</b>

**OTHER**

Information / Education Program	\$30,700
Information / Education Coordinator	\$172,000
Lake Water Quality Monitoring	\$120,000
<b>SUB-TOTAL</b>	<b>\$322,700</b>

**GRAND TOTAL                    \$7,637,398**

### Anticipated project funding partners

Iowa Department of Natural Resources – Lake Restoration Program	\$2,494,624
Iowa Department of Natural Resources – Section 319	\$381,744
Iowa Water Quality Review Board	\$175,000
Nebraska Department of Environmental Quality - Section 319	\$1,120,000
Nebraska Game and Parks Commission	\$2,105,837
Nebraska Environmental Trust	\$400,000
City of Omaha	\$500,000
City of Carter Lake (in-kind)	\$250,000

Metropolitan Area Planning Agency (MAPA) hired a project coordinator to work with both the local Watershed Council and agencies. One of their primary responsibilities will be to finalize plans on a first group of watershed improvement projects and have these projects ready to bid for final design/construction by fall of 2010.

- Project partners made significant progress at Carter Lake in 2010 with a spring alum treatment followed up by a complete fish renovation in the fall. Nebraska and Iowa, following the community accepted restoration plan guidelines established a no-wake zone on 100 acres of the lake in 2010 to lessen the impacts of recreational boating.
- The Carter Lake fish renovation was a joint project involving Nebraska Game and Parks, the City of Carter Lake, and Omaha.
  - Applied 2665 gallons of rotenone on September 26, 2010
  - Physically removed 89.6 tons of fish (Approximately 600 lbs/ac)
  - Each worker handled ~ 10,000 lbs of fish twice (pitched in & out the boat) in 3 days
- Almost immediately, visitors to Carter Lake saw drastically improved water clarity as a result. Water quality data collected during the summer of 2010 shows that toxic algae blooms have declined, phosphorous and nitrogen concentrations are lower, and water clarity has increased. However, there is still a need to control more phosphorus to meet water quality goals; therefore, another treatment will be needed in the spring of 2011.
- Tetra Tech is engineering wetland restoration and shoreline protection measures for spring/summer construction.

### Easter Lake (Polk County)

Easter Lake is a 178-acre constructed lake with a watershed to lake ratio of 36/1. Constructed in 1967, Easter Lake began as a lake in an agriculture/suburban watershed that over the years has shifted to a highly developed urban area. Construction activities and storm water issues have contributed greatly to more than a 20% reduction in lake volume. The Polk CCB owns and manages this area and they continue to work in partnership to accomplish lake and watershed improvements.



- A Technical Advisory Team has met several times from 2007 to 2010 to discuss plans for Easter Lake and the watershed. Representatives from the Polk County Conservation Board, City of Des Moines – Parks and Recreation / Public Works, DNR – Environmental Services Division / Fisheries / Watershed Improvement Section, Iowa Department of Agriculture and Land Stewardship, Iowa State University, and the Natural Resources Conservation Service have attended these meetings.
- The most recent meeting took place on July 12, 2010. Kathy Woida and her team at NRCS presented on their Yeader Creek Assessment (e.g. channel condition, location and sources of sediment delivery, quantification of sediment delivery, stream geomorphology and location/condition of storm sewer outfalls). The purpose of the NRCS study was to complement the current Iowa State University DF Study by providing additional information specific to the tributaries draining to Easter Lake.
- There are at least 160 storm sewer outfalls in the watershed, including 135 that discharge directly into the channel system. Eighteen of these structures exhibited moderate erosion of bank material immediately around the outfall, and three structures exhibited extreme erosion.
- 12% of channel banks were severely or very severely eroding at the time of the field assessment. More than half of the very severely eroding banks were adjacent to commercial property.
- When bank stability was evaluated on the basis of erosion rate and bank height, 2,100 feet of bank were identified as “critical” and 10,000 feet as “very unstable.” Nearly half of the critical banks occur in the South Branch between Diehl Road and the soapbox racetrack.
- Under current erosion conditions, and assuming a sediment delivery rate of 95%, channel bank erosion is contributing roughly 3,000 tons of sediment from the Main Branch and roughly 1,000 tons of sediment from the South Branch to Easter Lake each year.



- John Downing at Iowa State University presented on the components, goals and status of the Diagnostic/Feasibility Study of Easter Lake. When completed, this study will include a watershed and lake monitoring component and a discussion on potential restoration alternatives for the system.
- Easter Lake is one of our significant publicly owned lakes. Both of these studies are part of Lake Restoration Program's process to document the

causes, sources, and magnitude of lake impairment, evaluate the feasibility of the lake and watershed restoration options, establish water quality goals and a schedule for attainment and assess the economic benefits of the project.

- Polk County and the Iowa DNR are working together to design a park and lake user survey to investigate how satisfied the users are and what they would like to see improved. This survey will take place in 2011. A public meeting will take place in 2011 to inform the public of the results found during the surveys and studies and to begin development of a restoration plan.

### **Five Island Lake (Palo Alto County)**

Five Island Lake is a 950-acre natural lake located on the north side of the town of Emmetsburg, Iowa in Palo Alto County. In 1989, following five years of diminished recreational opportunities and poor water quality conditions due to low lake levels, a group of concerned citizens formed the Five Island Lake Board. They established two major goals for the project: Increase the lake water depth; and, improve the lake water quality.



Figure 5. Contour map showing depths in the vicinity of the dredged areas (4/22/08).

- The Lake Board has stabilized almost 10.5 miles of lake shoreline, dredged over 5 million cubic yards of silt, and worked in the watershed to reduce nutrients and sediment from entering the lake.
- Funding for this project requires a combination of state and local matching grants. Local monetary contributions to date exceed \$1.2 million. State funding as of FY11 is \$1.1 million.
- Summer 2008 tour with the DNR Director Leopold, State Senator Kibbe, local stakeholders and the DNR Lakes Program reviewed progress the need for continued watershed work to compliment local dredging efforts.
- In addition to the dredging portion of their project, the Lake Board is evaluating the need for additional work in the watershed and in-lake management strategies to achieve the desired water quality goals.
- The DNR and the City of Emmetsburg current annual agreement for dredging at Five Island Lake is \$200,000 (2010/2011 areas outlined in the map).

### **Hawthorn Lake (Mahaska County)**

The fishery in the 170-acre lake collapsed in 2004 after gizzard shad were introduced in 2002. The DNR lowered the water level to a 20-acre pool while the in-lake restoration work takes place. Once the work is completed, DNR Fisheries will renovate to remove gizzard shad and carp. The lake restoration plan includes armoring about one mile of highly eroded shoreline, building fishing jetties and installing fish habitat. In 2011, a series of basins will be installed in the watershed to intercept nutrients and sediment before it can enter the lake. Hawthorn Lake is part of the Hawthorn Wildlife Area, in northern Mahaska County, near Barnes City.

The Mahaska County SWCD applied for and received a watershed assessment grant from IDALS. They completed the assessment during the winter of 2007. The Mahaska SWCD applied for and received a WIRB grant of \$360,900 toward Lake Restoration activities. In addition, a total of \$75,371 in Publicly Owned Lakes (POL) funds will be available through the next four years. This is in addition to \$75,247 in POL funds spent in FY 2009 and \$58,000 for FY 2010. The SWCD has spent a total of \$20,000 of the 2010 POL funding creating approximately 800 feet of terraces, grassed waterways and one grade stabilization structure to date. Lake Restoration Program will utilize funds of \$450,000 for in-lake shoreline stabilization, deepening, and watershed improvement on state lands.

- DNR has awarded a \$379,857 contract to Cornerstone Excavating, Inc. of Washington Iowa for in-lake restoration work at Hawthorn Lake (\$147,824 Fish and Wildlife Habitat Funds, \$132,033 Lake Restoration Program, \$100,000 Mahaska County SWCD WIRB grant). The project, due for May 2011 completion, consists of the placement of in-lake habitat, shoreline armoring and deepening, and jetty construction/repair.
- DNR Engineering is developing initial design for nine water/sediment control structures on state land. The goal is to complete design by January 2011 and schedule appropriate environmental and archeological reviews for spring 2011 with construction later that year.
- Sediment delivery reduction from watershed work:
  - Grassed waterways constructed – two projects, 3 tons per year
  - Terraces constructed – sixteen projects, 263 tons per year
  - Terraces planned – seven projects, 66 tons per year
  - Sediment control structures on public land, 9 sites, 2,228 tons per year
- DNR will develop conceptual designs for the nine structures on public land by January 2011; then, initiate environmental and archeological reviews for the spring.

### **Hickory Grove Lake (Story County)**

The Hickory Grove Watershed is located in Story County, Iowa. It has a drainage area of 4,026 acres and landuse distribution of 84.7% row crop, 9.8% grass, 1.6% forest, 2.2% water, 0.9% barren and 0.7% artificial. Iowans consider Hickory Grove Lake an important recreational resource; however, the lake is experiencing event driven water quality problems that negatively affect this resource. In general, the Hickory Grove watershed has few elevation changes and much of the agricultural land is under tile drainage management. Storm related surface runoff has led to gully erosion, debris and nitrogen spikes immediately after these events.



The eastern end of the lake is now sediment filled, limiting boat access. The fishery is healthy; however, carp have destroyed most vegetation and IDNR is considering a lake fishery renovation. The lake has a designated use of primary contact recreation and is listed on the 2008 303(d) Impaired Waters Listing for elevated bacteria concentrations.

- Watershed Technical Advisory Team has met from the summer of 2008 - 2010 to discuss water quality improvement efforts at the lake. The NRCS received Development grant was in 2008 to determine critical areas in the watershed with significant quantities of sediment and nutrient delivery to the lake and completed a land use assessment in 2009.
- The NRCS has identified a number of potential BMP sites, including an approximately 70-acre CREP wetland, in the watershed and is working with outreach to landowners to get these practices installed. Story County SWCD held a watershed field day in June with several watershed landowners and operators.
- Iowa DNR Lakes Restoration contracted with the Agricultural and Biosystems Technology Department at Iowa State University to complete a diagnostic / feasibility study. ISU will collect data and develop specific models that will assist Story County and Iowa DNR in protecting and improving water quality and fishery at Hickory Grove. ISU will also take part in public meetings, work closely with watershed landowners and provide a status of the project in early 2011.
- A monitoring network has been installed in Hickory Grove Lake Watershed and samples are collected at five locations: two locations for subsurface drainflow, one location for both surface runoff and drainflow, one location at the outlet of the lake and one location on the south side of the lake (behind the boating ramp). ISU collected grab samples once per week at all locations and installed ISCO (Automated samplers) at three locations to continuously monitor flow and collect daily composite water samples.
- Future Tasks for ISU:
  - Water quality monitoring will be continued until December 2011.
  - Monitoring data will be used to calibrate the SWAT model and the calibrated SWAT model will be tested with different management scenarios to develop a Water Quality Improvement Plan for Hickory Grove Lake Watershed.



## Lake Geode (Henry County)

Lake Geode, located in Henry and Des Moines Counties, is a 174-acre lake encompassed by a 1,640-acre state park. The entire Lake Geode Watershed consists of approximately 10,327 acres. The watershed encompasses drainage from Cedar Creek and the lake outlets to the Skunk River. This scenic lake was constructed in 1950 and has excellent fishing. DNR estimates that Lake Geode State Park attracts approximately 180,000 annual visitors who camp, hike, fish, and boat within the park.

### Water Quality Problems:

The Class A use of Lake Geode has been significantly impacted since 2000, when excessive bacterial levels resulted in the posting of warnings at the beach area. The trend of excessive bacteria has continued from 2000-2004 and has resulted in a dramatic decline of beach usage and as a consequence the loss of the concessionaire. From 2005-2007, test results have not indicated excessive bacteria, but use at the beach area has not rebounded. It is the opinion of the local working group and technical advisory committee that the public perception is a fear of contaminated water and associated risks. High levels of pH in Lake Geode periodically exceed water quality standards (WQS) and impair two of the lake's designated uses. High pH in the lake is associated with photosynthesis by algae, for which total phosphorus (TP) is the limiting nutrient. The TP load capacity for Lake Geode is 8,576 lbs/yr (average annual) and 111 lbs/day (maximum daily). To meet the target loads, a reduction of 39.8 percent of the TP load is required.

### Proposed Management Measures:

The overall goals of the Lake Geode Watershed Project are to reduce bacteria, sediment and phosphorus from loading into Lake Geode. Project partners plan to achieve these goals through a combination of best management practices that will target identified source contributors from state and private land. The following agencies are working in partnership to achieve this goal, Iowa Department of Natural Resources (DNR), Iowa Department of Agriculture and Land Stewardship – Division of Soil Conservation (IDALS-DSC), Natural Resources Conservation Service (NRCS), Henry Soil and Water Conservation District and Des Moines Soil and Water Conservation District.

Goal 1: Address bacteria impairment of Lake Geode in an effort to remove it from the 303(d) list

Goal 2: Reduce total phosphorus and sediment delivery from agricultural and non-agricultural sources by 6,351 lbs/year and 2,499 tons/year, respectively.

A variety of structures and management practices will be required to reduce both TP and bacteria contributions to the watershed.

- Sediment control basins (catchments) on public and private land, including road structures.
- Livestock fencing, Elimination of continuous livestock access to streams
- Beach landscaping (with tall grasses), goose population management, beach groomer
- Septic system inspection and repair or replacement
- Manure application rates (nutrient management plans)
- Manure management (incorporation, timing, proper application rates)
- I/E campaign for septic systems.

The district hired a watershed coordinator and is meeting with watershed landowners to establish targeted watershed improvement measures. Funding has been secured through a number of partners (e.g. DNR Lake Restoration and Watershed Improvement Section / Iowa Department of Agriculture and Land Management) to implement these practices. NRCS is completing survey and design of eight structures on DNR property and should go out for bid 2011.

DNR staff will develop a Lake Geode diagnostic/feasibility study that will outline in-lake restoration options. Implementation of these options will only take place after sufficient sediment/phosphorus watershed reduction.

## Lake Macbride (Johnson County)

Lake Macbride (Johnson County) is a 940-acre lake owned by the State of Iowa. It has a 17,029-acre watershed that is mainly on private property. The watershed ratio is 18:1. The DNR Watershed Improvement Section completed a Water Quality Improvement Plan in 2005. The Lake Macbride Watershed Advisory Committee formed in 2001 and with assistance from Amy Bouska, Watershed Project Coordinator located at the Johnson County, the NRCS has \$725,000 on conservation practices and education in the watershed.

- In 2007, 900 feet of eroding shoreline was protected with rock riprap in the upper south arm of the lake.
- The DNR Lake Restoration Program and Johnson County entered into an agreement for protection of approximately 1,200 feet of shoreline along the Cottage Reserve Road with riprap. They completed the project fall 2008.
- In 2009/2010, the DNR implemented a timber management plan above a proposed gully erosion structures to reduce erosion. Practices included invasive and undesirable tree removal to open up the canopy and promote understory growth and seasonal burning.
- Repairs to shoreline, fishing jetties and islands completed in February of 2010 in response to 2008 flooding damage. Contractors used a total of 2,920 tons of riprap at a cost of \$62,000 (FEMA 90% / Lake Restoration Program 10%).

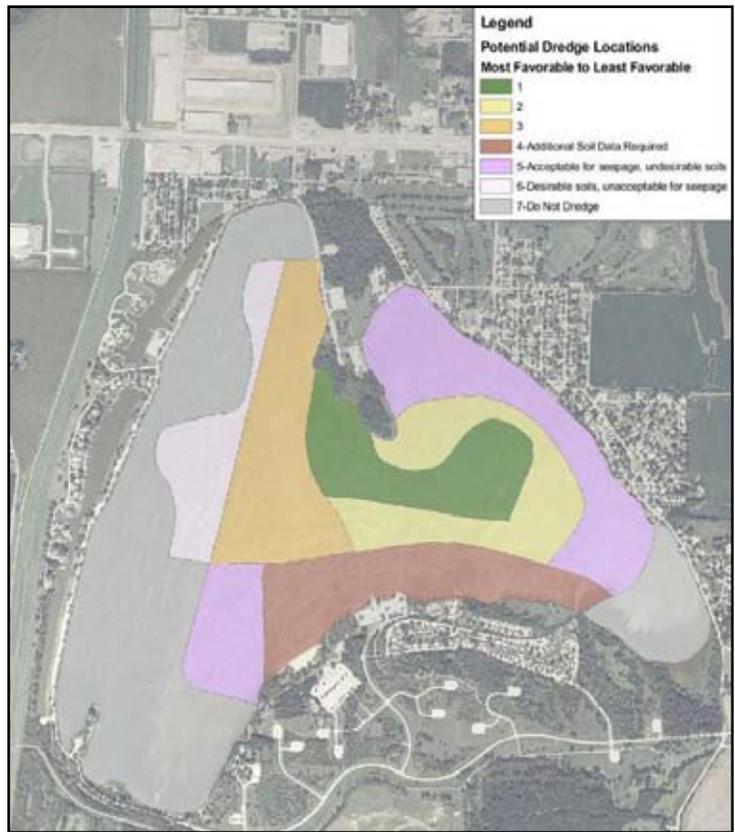


- Designs for two erosion control structures on public land are at DNR Engineering for review and bid letting. Construction should be in the summer/fall of 2011.

## Lake Manawa (Pottawattamie County)

Lake Manawa is a 715-acre natural lake with a watershed to lake ratio of 3.5/1. Mosquito Creek supplies additional water to the lake. Past lake dredging work in the 1960s deepened significant portions of the lake. However, maximum lake depth does not exceed 13 feet with large expanses of 6 to 7 feet deep water. The Iowa Department of Transportation approached the IDNR to explore the possibility of dredging the lake for sand to use for highway construction. However, there is concern about whether they can remove sand materials from Lake Manawa while still maintaining the hydraulic seal between the lake and the fluctuating Missouri River.

- The Iowa DOT and IDNR met during spring of 2007 and fall of 2008 to discuss opportunities to obtain highway building materials from Lake Manawa sediments.
- The IDNR hired Tetra Tech to conduct a diagnostic and feasibility study and review the option of dredging as a potential lake restoration activity.
- Tetra Tech also completed a Jurisdictional Wetland Delineation for Lake Manawa Pilot Dredge Spoil Site.
- The current phase involves working with Tetra Tech to finalize a dredging approach that will reduce the risk involved both in providing the materials to the specifications required and in the ability to control additional seepage from areas along the lake bottom. The project remains a viable opportunity for both IDNR and the Iowa Department of Transportation (IDOT).
- The IDNR continues to meet with groups such as the “Friends of Lake Manawa” to solicit support and to assist in moving the lake/watershed restoration project along.
- In advance of dredging, Tetra Tech has prepared a Phase I Archaeological Investigation as part of the Diagnostic and Feasibility Study of Lake Manawa.



THE KURSAAL, MANHATTAN BEACH, LAKE MANAWA  
 The Finest Bathing Beach in the West



**Potential stockpile locations for dredge material**

**Lake Wapello (Davis County)**

- The Lake Wapello restoration project is in the implementation phase of constructing 31 structures within the watershed, 11 of which are on state property. DNR estimates the total cost of restoration at approximately \$800,000. Structures on private land are being funded through IDALS Watershed Protection Funds (50% of total), 25% EQUIP, and 25% landowner cost share. Structures on state ground are being constructed at a cost of \$320,000; and are funded by the 319 (75%) and Lake Restoration (25%) programs.



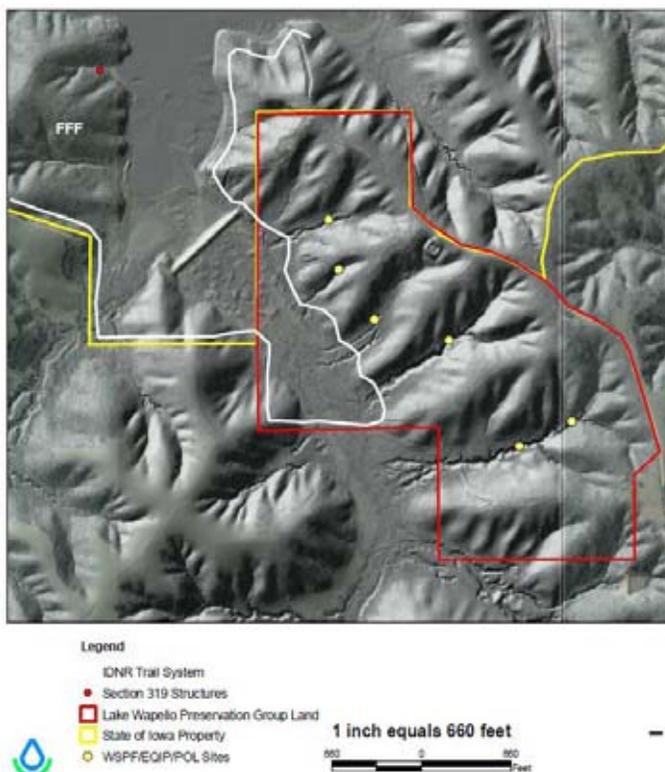
**Improved Angler Access from new fishing jetties**

**Lake Wapello during 2009 drawdown for in-lake habitat work, shoreline stabilization and outlet valve replacement**

- DNR will construct an additional nine sediment control basins and one water impoundment within the park boundary during 2011.
- Contractors completed in-lake restoration activities in April 2009. Projects included in-lake fish habitat improvement (placement of approximately 1000 cedar trees and placement of approximately 440 tons of riprap and 1600 tons of gravel. All existing fishing jetties were improved and three new jetties were constructed. One existing boat ramp was improved. Fish and Wildlife Trust Fund and Federal Aid to Sport Fish Restoration funded all of these efforts. Lake Restoration funded shoreline armament and shoreline deepening

(movement of approximately 15,000 cubic yards of material and 4,000 ton of rock required to armor approximately 2,500 linear feet of shoreline). One new silt dam was constructed and the aging and unreliable outlet valve was replaced. Total in-lake construction cost was \$394,142.74, of which \$267,649.50 were Lake Restoration funds.

- DNR fisheries renovated the Lake Wapello fish population in 2008; however, this process was repeated again in 2009 due to the illegal introduction of gizzard shad into the system for a second time. Chemical cost of this renovation was approximately \$30,000 each time, funded through fish and wildlife trust fund dollars.
- DNR and the Camp Wapello Preservation Group, in cooperation with Davis County SWCD, will also construct water/sediment control basins and a grade stabilization structure at Camp Wapello (se LIDAR image). These structures will trap 252 tons of sediment annually, control future advancement of head cuts and control the flow of water, which will help maintain the crossings on DNR trail system.



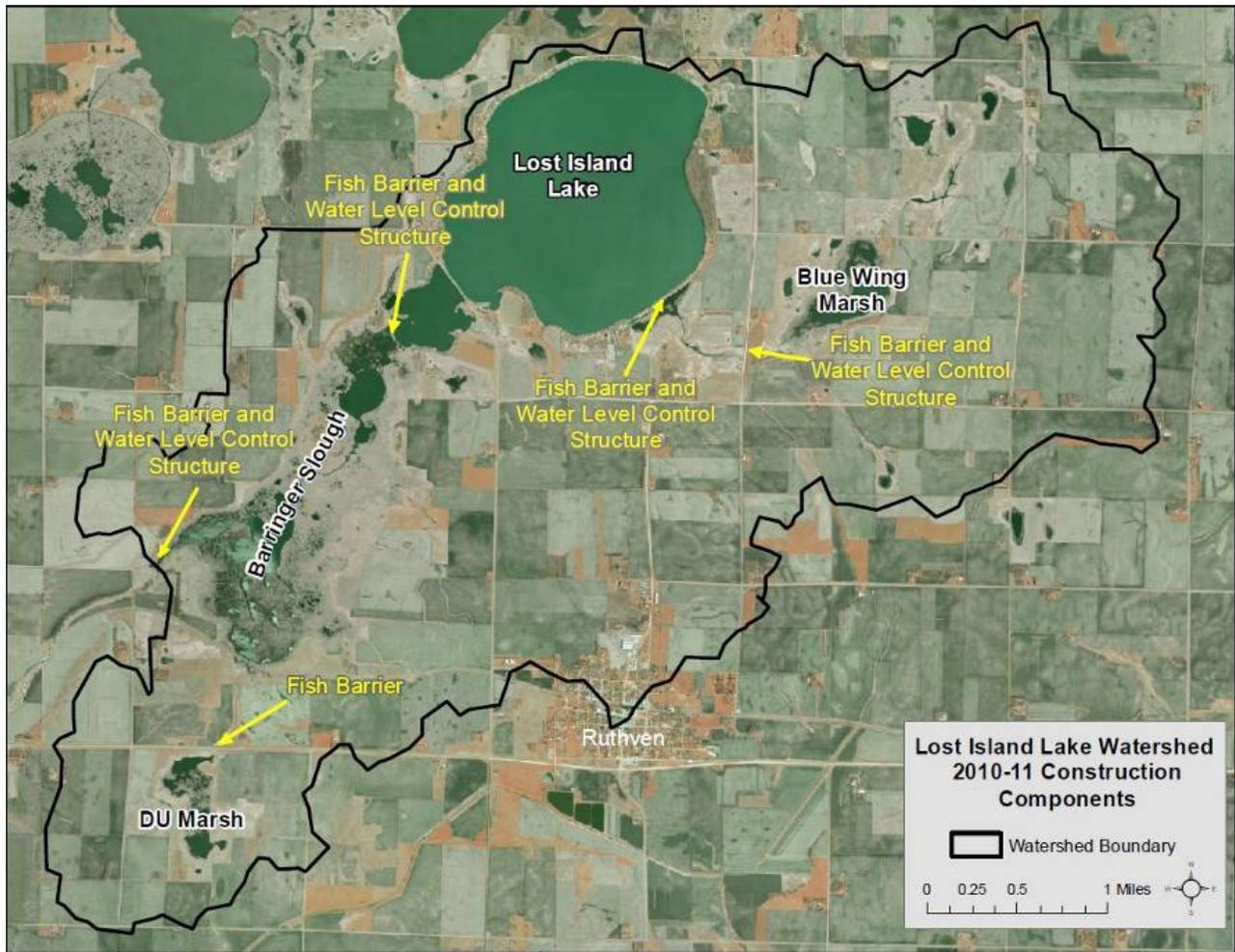
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### Lost Island Lake (Dickinson County)

#### Lost Island Lake /Barringer Slough / Blue-wing Marsh Complex

This is an aggressive and comprehensive plan to improve water quality in the > 2,200-acre complex by reducing existing carp numbers, preventing remaining rough fish from entering most spawning areas, and conducting beneficial drawdowns on associated wetland areas (780-acre Barringer Slough, 150-acre Blue-wing Marsh). Eliminate rough fish, allowing germination of aquatic plants and the resulting consolidation of bottom sediments will restore proper wetland function and improve the water quality at Lost Island Lake.

- The project includes an innovative plan to allow for the removal of up to 75% of the exiting carp biomass, an aggressive stocking of predatory fish and new construction or rehabilitation of four water control structures and five fish barriers throughout the complex.
- During summer 2008, DNR-Fisheries used mark – recapture techniques to estimate in-lake carp numbers and biomass. Commercial fishing contract resulted in the harvesting of approximately 300,000 lbs since February 2010 and will target of additional 300,000 lbs by spring 2011. Predator stocking includes walleye, largemouth bass and northern pike.
- DNR awarded Ducks Unlimited, Inc. a contract to design effective water control and fish barrier structures. The survey and design work began during summer/fall 2009.



- The NRC approved Lake Restoration Funding toward the \$789,000 bid from Landwehr Construction, St. Cloud, MN for the project. The Watershed Improvement Review Board awarded the Palo Alto County Conservation Board \$180,000 to cover part of the cost (two water level control/fish barrier systems); Construction Pre-construction meeting November 16 Construction to begin November 16.



- Local excitement regarding the project is high. Nearly 70 local stakeholders attended a December 2009 public meeting and voiced strong approval for the design work. The DNR, DU and local partners plan to construct most, if not all, the structures from winter 2010 through fall 2011. At present, a commercial hauler is aggressively removing rough fish from Lost Island Lake and the DNR is stocking large numbers of predatory fish into the system. Various basins were dewatered within the complex to eliminate rough fish, create favorable conditions for re-vegetation, and to prepare areas for fall construction.
- As of December 2010, Landwehr has installed the Blue Wing, DU Marsh, and Barringer Slough water control structures and fish barriers and had completed several necessary draw down channels. In January, the crew plans to install the electric fish barrier at the Barrier Marsh site and possibly start on the water control and fish barrier at the Lost Island Lake outlet. Once all structures are in place, all basins except Lost Island Lake will be dewatered to eliminate rough fish and allow for the germination of beneficial aquatic plants. Weather permitting; all basins should be at full pool during fall 2012 thereby providing excellent habitat for wildlife species and much-improved recreational opportunities for Iowans.
- The \$1.2 million project is a partnership between the Iowa Department of Natural Resources, Palo Alto County, Ducks Unlimited, and the Lost Island Protective Association.

### Lower Gar Lake (Dickinson County)

- Local concerned citizens and business owners that live on or recreate on the Iowa Great Lakes system, specifically Lower Gar, Minnewashta and Upper Gar, formed The Three Lakes Improvement Association.
- IDNR Lakes Restoration staff has met with this group several times in the past years to discuss lake water quality and water depth issues and contracted with Iowa State University to conduct a diagnostic/feasibility to examine lake issues. This study was completed November 2011.
- The Iowa Department of Natural Resources hosted an informational meeting to discuss the results of a diagnostic and feasibility study of the Lower Chain of the Iowa Great Lakes (Upper Gar Lake, Minnewashta Lake, and Lower Gar Lake). Iowa State University conducted this study over the past three years in an effort to understand the factors influencing water quality in these lakes. The results will also provide guidance to resource professionals, lake residents, and the local community for improving lake water quality. The meeting was held June 2010 at the Milford Community Center.
- The Natural Resource Commission approved the acquisition of a 90-acre tract of land offered by the Iowa Natural Heritage Foundation for \$478,000 (\$250K LRP, \$150K NAWCA and \$78K REAP Open Spaces). The tract was appraised at \$578,000 (INHF received a \$100,000 grant from the Dickinson County Water Quality Commission). This is part of a larger 230-acre tract acquired by the INHF in March 2010. After restoration, the land will contain 54 acres of native prairie plantings and 35 acres of restored wetlands. The Lake Restoration Program continues to budget and work with local partners to pursue opportunities for targeted watershed improvement.



## Meadow Lake (Adair County)

Meadow Lake is a 34-acre public owned lake located six miles north of Greenfield in Adair County. Constructed in 1963, the lake sits within a larger 320-acre fish and wildlife area owned and managed by the Iowa Department of Natural Resources to provide fishing, hunting, and other outdoor recreation activities for the public. Overall, Meadow Lake has provided good fishing for largemouth bass, bluegill, crappie, and channel catfish for over 40 years. The DNR listed Meadow Lake as an impaired water (303d) in 2004 for algae and added impairment for turbidity in 2008. The presence of aesthetically objectionable blooms of algae and poor water transparency impair the primary contact recreational uses at the lake.

The IDNR lowered the water level in Meadow Lake starting late summer of 2008 to facilitate a significant fish habitat and shoreline stabilization project, which included 740 feet of shoreline stabilization, rock reefs (2), pea gravel spawning beds (3) and a rock field. This project will enhance the fish habitat in Meadow and have water quality benefits. The shoreline stabilization work addressed all the actively eroding shoreline in the lake. The total cost of this project was \$65,000 including \$22,200 for stabilizing eroding shoreline. Three sources contributed to this project the state of Iowa Fish and Wildlife Trust Fund (\$15,250), Sportfish Restoration (\$45,750), and the Jensen-Butler Conservation Foundation (\$4,000).



- DNR Lake Restoration and the Watershed Improvement Section, with design from NRCS, constructed an in-lake structure in the spring of 2010 at Meadow Lake to achieve sediment and phosphorous reduction from 236 acres of the watershed. In addition, we constructed two wetlands above Meadow Lake by the fall 2010. The larger of the two wetlands will impound 14 acres of water when filled.

<b>Meadow Lake Restoration Project</b>			
	Watershed Protection (319) Funds (75%)	Lake Restoration Funds (25%)	Total
In-Lake Sediment Retention Structure	\$46,250	\$15,417	\$61,667
14-Acre Wetland	\$36,923	\$12,308	\$49,230
2.5-Acre Wetland	\$14,811	\$4,937	\$19,748
<b>Total</b>	<b>\$97,984</b>	<b>\$32,662</b>	<b>\$130,645</b>

## Prairie Rose Lake (Shelby County)

Prairie Rose Lake is a 173-acre constructed lake with a watershed to lake ratio of 23.5/1. Problems at the lake center on low fish populations, historic lake siltation and poor water quality. Lake improvements

in recent years include; jetties and fish structure (1998), sediment basin and shoreline riprap (2001) and sediment basins (2004). Local efforts have accomplished significant work in the watershed and identified additional work for completion.

- IDNR Fisheries and Parks staffs have been meeting with NRCS, IDALS, and others about remaining watershed work and initial lake restoration plans, based in part, on findings from the diagnostic/feasibility study completed by Iowa State University in 2008.
- Selby County SWCD conducted a watershed assessment followed by a joint Iowa Department of Agriculture and Land Stewardship / DNR Watershed Improvement Section grant to accomplish targeted soil conservation work in the watershed. The Shelby County Soil and Water Conservation District was awarded a \$510,611 Water Quality /Watershed Protection Project Grant in 2008
- Now in the final year the Prairie Rose Water Quality Project has constructed over 100,000 feet of terraces and completed designs four wetlands around the lake.

**Harlan Community High School students sample water in the Prairie Rose watershed**



on

<b>Prairie Rose Restoration Plan</b>	<b>Estimated Cost</b>
Containment site purchase	\$340,000
<b>Phase 1: Begin to drain lake July 11, 2011</b>	<b>Fall 2011 - Fall 2012</b>
Two road risers and two wetland rock chutes	\$80,000
Replace M47 road structure / raise water level	\$100,000
Spillway modification	\$250,000
Repair gate valve	\$15,000
Containment site construction	\$200,000
Mechanical dredging (South-east basin)	\$450,000
Shoreline armoring	\$275,000
Fish habitat construction	\$150,000
Fish renovation	\$10,000
<b>Phase 2: After lake re-fills</b>	<b>2013</b>
Hydraulic dredging	\$1,300,000
<b>Total</b>	<b>\$3,170,000</b>

- IDNR, in partnership with Pheasants Forever, acquired a 77-acre dredge spoil containment site in 2010, an important component to the in-lake restoration work. Archeological survey is being done on state lands that will be disturbed by construction and engineering plans are being developed for in-





- The proposed new total project cost estimate is \$6,076,000 (total requirement for State cash and contributions for in-kind and land credit is \$1,519,000, Federal cost requirement is \$4,557,000).
- To date, the State has provided a total of \$939,000 in State cash toward the cost share of the project, and \$26,000 of work in-kind at the South Fork Wetland component of the project. This new total project cost requires an additional State cash contribution of \$500,000 for the Shoreline Restoration work, and the additional Federal funding requirement of approximately \$1,300,000.

**Rathbun Section 1135 Cost and Cost Sharing Estimate - Update December 2010**

<b>Total Project Cost</b>	\$6,076,000
Federal Share (Cash)	\$4,557,000
IDNR Share	\$1,519,000
IDNR Share Breakdown:	
Cash	\$1,439,000
In-Kind South Fork Construction	\$26,000
In-Kind S-13 Wetland Design	\$25,000
Lands for S-13	\$29,000

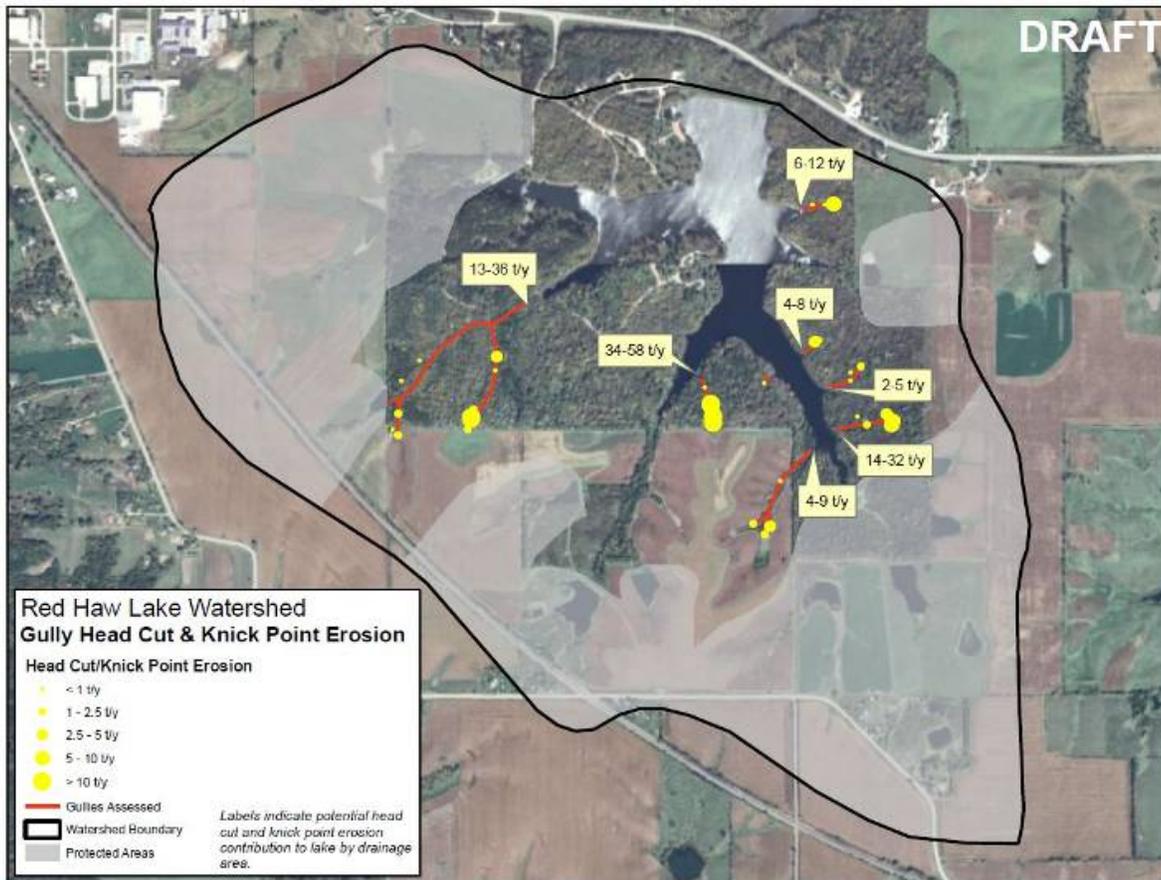
**IDNR Cash Requirement = \$1,519,000 - \$939,000 provided - \$80,000 in-kind = \$500,000 FY11**

**Federal Cash Requirement = \$1,400,000**

- The Section 1135 project will address nine sites and total rock placement will exceed 45,000 tons of riprap. In addition to water quality improvements, fish habitat will be improved for a number of important game fish species.

## Red Haw Lake (Lucas County)

- In 2001, a wetland and three sediment retention ponds were constructed within this watershed to improve and protect water quality.



- Recently IDALS performed a watershed assessment and identified priority gully areas. The District and NRCS required additional assistance in funding for the design and construction of six to eight structures within the State park. DNR will survey / design / construct these grade stabilization and sediment basin structures in 2011/2012.

## Rock Creek Lake (Jasper County)

Rock Creek Lake is a 491-acre lake constructed in 1952. The lake has a watershed to lake ratio of 54/1. Iowa State University, in a 2000 Diagnostic/Feasibility Study, indicated that over the last 50 years the lake has lost almost 40% of its lake water volume and 102 lake surface acres. Local efforts have accomplished some work in the watershed; however, local and state partners need a renewed effort to move this project forward. Continued watershed improvement projects have been a difficult “sell” to area landowners.

A fall 2008 technical work group meeting resulted in an outlined approach to meet the necessary reductions in sediment and nutrient delivery to Rock Creek Lake. It focused on dividing the total watershed into larger subwatershed segments, and then designing larger watershed structures that will require a higher government percentage contribution to put these water quality improvement practices in place. Several landowners had expressed interest in this concept; however, due to the inability to implement projects on private ground, the involved agencies did not grant the requested Watershed Project extension and the project contract expired December 31, 2009.

- During fiscal year 2009, landowners completed some small practices such as waterways and small basins in the Rock Creek Watershed as part of the funded Watershed Project. Implementation of these practices resulted in a sediment reduction of 1,439 tons/year and 750 acres protected from June 2008 to September 30, 2009.
- Work on the Rock Creek Watershed Project at this time is limited to five grade stabilization structures in the state park. The project coordinator had selected these sites for the placement of three ponds and two large basins to address critical areas of gully erosion. NRCS has completed design and DNR is planning for spring/summer 2011 construction.
- This challenging watershed will require this and other innovative concepts to significantly reduce sediments and nutrients from reaching Rock Creek Lake and to eventually allow us to move forward with the D/F studies lake restoration measures.

### **Silver Lake (Delaware County)**

Silver Lake is a small, natural lake enlarged by the construction of a dam. It has a 34-acre surface area lake and a lake ratio of 6.4/1. University of Northern Iowa completed a diagnostic feasibility study in 2001 and the IDNR completed a Water Quality Improvement Plan analysis in 2001. Lake depth maps and sediment borings indicated excessive lake sedimentation depths ranging from 0.5 to 4 feet. A lake watershed assessment conducted in 2001, documented areas of high phosphorus input in the watershed. The assessment also identified excessive manure application levels as a problem. NRCS continues to work with landowners in the watershed to reduce nutrient and sediment lake inputs.

- In 2001, an engineering firm evaluated dam integrity and leakage issues. The construction firm hired to repair the dam and eliminate dam safety issues completed the work fall of 2007 at a cost of \$314,950.
- Lake water overflowed the Silver Lake spillway in April of 2008 following dam repair and wet weather conditions. According to local reports, this marks the first spillway overflow since 1993. Silver Lake reached full pool in April of 2008 and full pool level maintained until approximately August of 2008. The lake now contains about double the volume of water it did in the period immediately prior to the dam repair during the fall of 2007. The current lake level in Silver Lake is approximately 6 inches below crest following a period of dry weather.
- Silver Lake suffered a moderate winterkill during the severe winter of 2007-2008 that effectively eliminated largemouth bass and channel catfish from the system and reduced the bluegill population. DNR Fisheries restocked Largemouth Bass in June 2008 and the Bluegill have recovered favorably following a 2008 growing season. A winterkill also occurred in the winter of 2008-2009, but it was minor. Silver supported moderate recreational fishing during the open-water season of 2009 with good harvest of 6-7.5 inch bluegill and additional catches of 10-12 inch largemouth bass and 18-26 inch northern pike. Almost no fishing occurred on Silver during the 2007 and 2008 fishing seasons, so we are pleased with the increased recreational use.
- Vegetation and clarity volume, including abundant vegetation and secchi depth transparencies that commonly exceeded 30 inches, in the lake seem to be responding favorably to increased water. Vegetation was largely absent from Silver Lake during the 2006 and 2007 growing seasons and secchi transparency commonly fell below 24 inches. Aquatic macrophytes (primarily coontail and narrow-leaved pondweed) were abundant during the summer of 2009. Increased vegetation can pose a nuisance to recreational fishing, boating, and lake aesthetics; however, the dense vegetation coverage promotes improved water clarity and reduces the abundance of free-floating algae.
- Secchi measurements from the summer of 2009 indicated transparencies from 46-61 inches.
- DNR completed a Water Quality Improvement Plan for Silver Lake in the fall of 2008 and this study highlighted watershed areas responsible for primary phosphorus delivery. The goal is to form local action committees to address watershed inputs. Following watershed improvements that reduce sediment delivery and phosphorus inputs, the community and biologists are hoping to remove phosphorus-rich sediments from Silver Lake to help reduce problems associated with internal phosphorus loading.

- During 2010, members of the Delhi Community formed a small community-led workgroup. This workgroup held two meetings during the 3<sup>rd</sup> quarter of 2010 to discuss options for watershed improvement and in-lake water quality improvement.
- Silver Lake supported a good largemouth bass fishery during 2010, but still green algae and blue-green algae blooms negatively influenced the aesthetics and water quality of Silver Lake during the late summer and fall of 2010.

### **Union Grove Lake (Tama County)**

Union Grove is a 105-acre shallow constructed lake owned by the State of Iowa, with a watershed to lake area ratio of 63/1. It has 6,640 acres in the watershed with the vast majority is in private ownership. In the late 1980s, the state dredged the lake and installed an in-lake silt and nutrient dike on the north end of the lake. The DNR purchased an additional 60-acre parcel on the southwest side of the park and constructed a 10-acre pond. Union Grove Lake was last dredged from 1988 - 1990. Dredging from Union Grove Lake involved removal of 275,000 cubic yards of sediment accumulated since the lake was built in 1936.

- Union Grove Lake is on the Iowa's 2004 impaired waters list because of four limitations: pH, bacteria, algae, and turbidity. The IDNR is working with local sponsors to develop a plan to improve the lake and water quality conditions.
- The Union Grove Lake Watershed Project has been underway since April of 2008 and is scheduled to end June 2011. The project aims to reduce the soil and phosphorus reaching the lake by 57%, as well as reduce the effects of livestock on streams in the watershed. The Union Grove watershed received \$40,000 in grants for approved soil conservation practices, stream bank protection, fencing of livestock and a RASCAL (Rapid Assessment of Stream Conditions Along Length). To date, the Union Grove Watershed Project has completed 8.1 acres of new grassed waterways with an additional 5.8 acres under construction.



- Spillway water seepage had been an on-going problem at Union Grove Lake and past attempts to repair the problem had limited success. IDNR hired a geo-tech firm in 2005 to evaluate the problem and contracted a firm in 2006 to repair the structure.
- They completed the project in July of 2007 and successfully addressed the water seepage issue. Total project cost for the spillway repair was \$178,572, with the Lake Restoration Program as the funding source. The construction firm also made several recommendations for additional future spillway modifications that will preserve the integrity of the system at an estimated cost of \$40,000.

## Lake Restoration Program (LRP) – Projects In Planning / Outreach Stage

### Arbor Lake (Poweshiek County)

Arbor Lake (Poweshiek County) is a 13-acre lake owned by the City of Grinnell. It has 979 acres in the watershed in which 75% is urban runoff. The watershed to lake ratio is 75:1. Watershed Improvement Section completed a Water Quality Improvement Plan in 2002.

- In 2005, the City of Grinnell received a \$150,000 NRCS grant to improve the watershed. They installed three wetland complexes that targeted 298 acres of the watershed, storm sewer interceptors that controlled another 18 acres and riffle pools on Hazel Creek to reduce erosion and down cutting of the stream. The City also planted two acres of native vegetation filter strips along the riffle/pool structures and established one three-acre rain garden at the Windsor Assisted Living Complex east of the lake.



- In October of 2009, representatives from the DNR and City of Grinnell along with IOWATER members held a successful and informative meeting regarding Arbor Lake Restoration. The goal is to work through an Arbor Lake Restoration Advisory Council and develop a Management Plan for Arbor Lake. In October 2010, representatives from the DNR and City of Grinnell along with IOWATER members held a successful and informative meeting regarding Arbor Lake Restoration. Participants included IOWATER, Grinnell College, Grinnell Parks and Recreation Board Member, City of Grinnell, and the DNR.
- Grinnell Parks and Recreation Department installed a new message center with signage that included fish, fishing and lake information. The message center is next to the walking trail around the lake. DNR Aquatic education gave the Grinnell Parks and Recreation Department a \$2,000 grant for urban aquatic programs for the summer. They collaborated with members of the community, Grinnell High School and Grinnell College to teach youth about fish, fishing, pond studies and water quality issues.

### George Wyth Lake (Black Hawk County)

George Wyth is a sand borrow-lake with relatively low overall fertility when compared to other Iowa Lakes due to predominately sand substrates and a “new” lake basin. George Wyth’s historic fishery was moderate to poor, due to relatively low productivity and a lack of aquatic vegetation. Water quality parameters in George Wyth Lake compare favorably to other Iowa lakes, due to a low watershed to lake ratio and relatively small portions of watershed in agricultural production.

- The DNR Watershed Improvement Section completed a Water Quality Improvement Plan for George Wyth Lake in 2008 to address impairment due to high bacteria levels on the beach, with the primary cause for impairment identified as resident geese. Flooding from the Cedar River in 2008 affected George Wyth Lake and the State Park.
- Biologists introduced aquatic macrophytes into George Wyth Lake in the fall of 2009 on an experimental basis. DNR will monitor the success of Wild Celery and Narrow-Leaved Pondweed introduced into two enclosures over the upcoming year. If the experimental introductions prove successful, we will expand the plantings during the upcoming years.



- During a vegetation inventory completed on George Wyth Lake in July of 2010, DNR staff found six species of submersed aquatic plants, two species of floating-leaved aquatic plants, and three species of emergent plants. Planted during 2009, we found Wild Celery within enclosure structures and narrow-leaved pondweed at multiple locations in the lake.
- At the time of the survey, about 15% of the lake was covered with aquatic vegetation. George Wyth Lake was practically devoid of vegetation from 1988 – 2009, so biologists are optimistic that an aquatic plant community will improve water quality and fishery resources in

the lake. Biologists are uncertain as to what caused the proliferation of vegetation in 2010, but the most likely explanation is that the flood of 2008 delivered sediment, seeds, and plant fragments to George Wyth Lake.

- During 2010, George Wyth Lake experienced high water levels for much of the year due to persistent flood conditions on the nearby Cedar River. High water conditions and an increased abundance of aquatic plants promoted improved water clarity and improved overall water aesthetics at George Wyth Lake during 2010.
- Biologists will continue to monitor the aquatic plant community in George Wyth Lake during 2011 and will determine if additional plant introductions are necessary. DNR Fisheries will work cooperatively with DNR Parks to manage vegetation in areas with high public use (e.g., beach and boat ramp).

### **Lake Keomah (Mahaska County)**

- DNR held a public meeting in fall of 2009 to gauge local support for restoration activities at Lake Keomah. The Mahaska County Soil and Water Conservation District applied for, but did not receive, a watershed assessment grant to evaluate the status of sheet and rill and gully erosion within the watershed in 2008. They completed a sheet and rill assessment in 1991; however, it did not include any assessment in the State Park or in Keomah Village.
- Current activities center on the creation of a “Friends” group for the State Park, laying the groundwork for local support and participation in future restoration activities.

### **Little River Lake (Decatur County)**

Little River Lake was created in 1983 as a multipurpose PL-566 structure to reduce flood damage, provide drinking water for the City of Leon and Decatur City, provide an established fishery, and to provide recreational opportunities for Decatur County and neighboring areas. Little River Lake is a 753-acre lake with a 17:1 watershed to lake ratio. For the first 15 years, the lake produced tremendous quantities of quality fish. However, common carp, an inadequately protected watershed, and unprotected shoreline problems have reduced water clarity, suppressed sport-fish abundance and growth, recreation opportunities, and increased water treatment costs. Fish quality and angling activity

have steadily declined since 2000 to a point where the lake offers few sport-fish or angling opportunities today.

- A coalition of local interested entities formed a restoration committee in 2008. Since that time, the group has met to plan and implement water quality improvement practices for the watershed.
- The Decatur County Soil & Water Conservation District and NRCS personnel assessed the watershed's problems, quantified soil erosion, and identified best management practices, (BMPs). The Watershed Improvement Review Board (WIRB) awarded the Decatur SWCD a \$423,900 grant to cost-share improvement costs with landowners. The group also received a letter of support from the DNR Lake Restoration Program to consider Little River Lake for future funding for in-lake improvement projects. Pending adequate implementation of watershed soil conservation practices, Lake Restoration funding will address in-lake improvements such as shoreline stabilization, rough fish management and silt basin improvements.
- The NRCS staff is currently formalizing agreements with landowners and designing BMPs to address sight specific remedies. As of December 2010, Decatur SWCD has contracted approximately 35% of the funding with another 30 % pending approval. The NRCS staff has been prioritizing areas for the remaining funding.
- The restoration process during 2011 will involve implementation of remaining targeted watershed practices with available WIRB funding. Re-assessment of the watershed will guide planners to any remaining areas of the watershed to address before potential work in-lake.

### **Mariposa Lake (Jasper County)**

- The Mariposa watershed project is set to run through June 2011. The NRCS completed a waterway project in spring 2009.
- The Jasper County Conservation Board has completed bank stabilization practices along approximately 900 ft of shoreline using rock riprap and coconut fiber logs and has completed a 3-acre timberstand improvement project. An overgrown area over a gully was cleared to approximately 25% canopy cover to allow grasses to grow and seeded to native grasses and wildflowers.
- The Jasper County Conservation Board is completing final steps to install a wetland immediately above the lake on the main feeder stream and plans for construction of the wetland in spring 2011.

### **Pleasant Creek Lake (Linn County)**

Pleasant Creek (Linn County) is a 401-acre lake owned by the State of Iowa. It has a 2,035-acre watershed in which the State owns 90%. The other 10% is mainly in timber. The watershed to lake ratio is 5:1. One specific concern with this lake is shoreline erosion. DNR staff has documented approximately five miles of shoreline in need of stabilization along with many shallow areas for deepening.

There may be some opportunity to do some gully control structures on park property and review and update land management approaches on state ground. DNR Fisheries and Parks are working cooperatively with IDALS to developing a plan to address these problems.



## Shallow Lakes Management Initiative

Ducks Unlimited and the Iowa DNR's Wildlife and Fisheries Bureaus established a prioritized list of at least 50 shallow lakes to be renovated over the next ten years. The first lake to be renovated was Diamond Lake in Dickinson County. Renovation work began during summer 2006. Shallow lakes prioritized for restoration include; Dan Green Slough in Clay Co., Four-Mile Lake in Emmet Co., Pickerel Lake in Buena Vista Co., South Twin Lake in Calhoun Co., Virgin Lake in Palo Alto Co., and Lizard Lake in Pocahontas County.

The following excerpt, provided by Joe Larscheid, DNR Fisheries, describes the basis and objectives for the DNR's Shallow Lakes Management Initiative.

"Shallow lake management has always been a challenge in Iowa and around the world. Shallow lakes are scattered throughout Northwest Iowa and, in most of these lakes water quality lakes is less than desired. In fact, most of these lakes are turbid, algae-dominated systems with little to no vegetation, and poor sport fisheries comprised mostly of common carp (*Cyprinus carpio*), and black bullheads (*Ameiurus melas*). Successful restorations of deeper lakes have historically focused on reducing nutrient inputs by repairing the watershed and/or removing phosphorus-laden sediments from the lake. Successful shallow lake management strategies require intensive in-lake management strategies that can immediately flip the basin from the turbid-water state to the clean-water state, and long-term watershed protection efforts that help maintain clean water over time."

Shallow lakes differ substantially from deeper lakes in many respects (Scheffer 1998). Shallow lakes usually exist in either of two alternative stable trophic states with or without any change in the nutrient budget of the lake (Scheffer et al., 1993, Moss et al., 1996). These lakes can exist as very turbid, algae-dominated systems with little to no vegetation, or as clear water, macrophyte dominated systems. In shallow lakes, the benthivorous and planktivorous fishes along with wind and wave action and in some cases heavy boating traffic can perpetuate the algae dominated system.

By controlling or removing the factors perpetuating the algae dominated turbid system, it is possible to "flip" the system into a clear water macrophyte dominated system (Scheffer, 1993). The positive impacts of emergent and submergent vegetation on water quality are due to several factors. Rooted vegetation prevents resuspension of sediments into the water column by solidifying bottom sediments and suppressing wind and wave action. Rooted plants provide habitat for periphyton and zooplankton and fish species commonly found in clear water lakes. Rooted vegetation also ties up nutrients making them unavailable for algae. Some plants also release allelopathic substances into the water suppressing algae growth. Many of these mechanisms are difficult to assess and vary among water bodies; however, their combined effect stabilizes the clear water trophic state (Scheffer et al., 1993). Both the clear water macrophyte state and the algae dominated state are stable, and it takes a major perturbation to move from one state to another (Scheffer et al., 1993). Three methods that show great promise to cause the shift from the turbid to the clear water state are benthivorous fish control, heavy piscivore stockings (to control both benthivorous and planktivorous fishes), and water level draw downs (Scheffer et al., 1993). The goal of this project is to develop tools that managers can use to shift and maintain shallow lakes in a clear water state.

### Shallow Lakes Management Project Components:

- Shallow lake renovation based on alternative stable trophic states: Management guidelines that cause shallow lakes to shift from the turbid, algae -dominated systems to the clear, macrophyte-dominated systems.
- Physical characteristics of shallow lakes before and after restoration: Characteristics include information about the watershed, bathymetry, sediment profile, and water chemistry of the lakes.
- Biological characteristics of shallow lakes before and after restoration: Characteristics include the plankton, macrophyte, fish community and waterfowl use of the assessed lakes and the related changes to benthivorous fishes from biomanipulation of these biological components.

**Introduction:** Natural Lakes in Northwest Iowa are mainly characterized as shallow, windswept systems that exhibit poor water quality. Significant watershed changes and the introduction of common carp in the late 1800's have forever made management of these water bodies a challenge. Through work accomplished on the projects listed below, great strides have been made in our understanding of these systems. These ground breaking projects in Iowa will undoubtedly lead to others as the health to these unique water bodies is restored. Success is also being measured in public education and outreach, communities and user groups are coming together to make these projects truly successful demonstration models for improving not only water quality, but fostering partnerships for the long-term active management required to maintain the health of these lakes.

The current focus of the Lake Restoration Program is on shallow lakes that support both fishing and wildlife benefits. In addition, there is an emphasis on shallow systems above important natural lakes.

### **Active Shallow Lake Projects**

**Lizard Lake, Pocahontas County** - Lizard Lake is a highly degraded 285-acre shallow natural lake. Rough fish (buffalo, bullhead and carp) dominate the lake population. The lake contains very little area of aquatic vegetation and exhibits poor water quality. A local lake group has promoted lake restoration and they continue to meet with IDNR staff to discuss their concerns. In June 2006, IDALS and the local Soil and Water Conservation District awarded a Development Grant to evaluate the watershed of Lizard Lake. The Iowa State University Limnology Laboratory conducted a Diagnostic Feasibility study for Lizard Lake. This 2008 study, completed by Dr. John Downing, states that Lizard Lake is one of the most eutrophic lakes studied in Iowa.



As part of potential restoration alternatives, ISU presented "shallow lakes management" as an option for improving the lake's water quality, fish population structure and wildlife potential. During 2008 and 2009, IADNR staff has met several times with local partners and stakeholders to discuss shallow lake management options for Lizard Lake. Many stakeholders recognize the benefits of shallow lake management and expressed a preference for that type of management. Other stakeholders, while preferring dredging, realize that high dredging costs make that option unattainable and therefore support shallow lake management. Other stakeholders preferred to continue supporting dredging as the only alternative.

Due to relatively strong support from most local constituents, the DNR hired Ducks Unlimited to conduct survey work during winter 2009 and plans to construct a water control structure and fish barrier. Engineering plans for a new water control structure, a fish barrier, and improved draw down channels have been completed, bid letting will occur January 2011 and installation of this infrastructure is expected to occur this late winter or next spring. Once installed, the lake will be temporarily drained to eliminate high populations of common carp and other problems fish, allow for the consolidation of loose bottom sediments, and promote the growth of aquatic plants. These plants will help keep water in the lake clean by holding down bottom sediments, reducing wave energy, using up nutrients otherwise available for growing algae, and provide habitat for the small invertebrates that eat algae. Aquatic plants will also provide excellent habitat for sport fish and a multitude of game and nongame wildlife species that depend on clean-water lakes for survival. Pending appropriate weather patterns, Lizard Lake will be refilled in fall 2012 and quality sport fish will be stocked soon after.

**Pickereel Lake, Buena Vista County** - Pickereel Lake, located in extreme NE Buena Vista County, is a 170-acre basin that suffers from the same problems as most other shallow lake basins in the upper Midwest; poor water quality due to an intensively cultivated watershed, an overabundance of rough fish, and a lack of beneficial aquatic plants. Even with poor water quality, walleyes have surprisingly been able to reproduce in Pickereel Lake. To enhance water quality and fish and wildlife habitat in Pickereel Lake, project partners will initiate intensive in-lake management this winter and will continue to work long-term throughout the watershed to ensure that soil, fertilizers, and pesticides stay on the uplands. In-lake actions will be done this winter or early next spring and include installing a new water control structure and fish barrier on the lake's outlet and enhancing existing draw down channels in the lake and downstream of the new water control structure. Once this infrastructure is in place, the DNR will temporarily drain the lake to allow for the elimination of problem fish, the consolidation of bottom sediments, and the establishment of beneficial aquatic plants. Weather permitting, Pickereel Lake will be allowed to refill by fall 2012 and quality sport fish, including walleye, will be restocked in the lake. Based on ecological responses of other recently restored shallow lakes, we anticipate that water quality will improve, fish and wildlife habitat will be more prevalent and diversified, and human recreational opportunities will increase.

### **Near-Future Shallow Lake Projects**

**East and West Hottes Lake/Marble Lake/Grovers Lake Complex, Dickinson County** - Located within the 1,700-acre Kettleston Hogsback wildlife complex in northern Dickinson County, these 4 basins are of extreme importance to fish and wildlife as well as water quality in the Iowa Great Lakes. Historically, these basins contained a diversity of high quality aquatic plants that supported a wide array of sport fish, waterfowl, water birds, furbearers, reptiles, amphibians, and other wildlife. Excessive numbers of carp and chronic high water levels have resulted in the loss of many of these plants and the animals that depend on them. Project partners, including the Big Spirit Lake Association, DNR, DU, Dickinson County, and others will provide funding and technical guidance to fund a comprehensive feasibility study to identify ways to return ecological health to this critical habitat. Final design will incorporate water control structures and pumps that allow for the temporary draining of the basins and fish barriers that allow for the passage of game fish but preclude the passage of carp. Partners hope to complete the feasibility study by this spring and begin construction by fall 2011.

**Virgin Lake, Palo Alto County** - Virgin Lake is a unique 220-acre basin in western Palo Alto County that features a highly diverse shoreline, back bays, peninsulas, and islands. Like other shallow lakes in Iowa and the upper Midwest, it has become unhealthy due to intensive agriculture in its watershed and an overabundance of rough fish. Together, these and other factors have resulted in turbid water in the lake and the subsequent loss of the beneficial aquatic plants needs to sustain clean water and provide habitat for sport fish and aquatic wildlife. Project partners, including DNR and DU plan to improve the lake by riding the lake of problems fish species, restoring aquatic plants, and stocking quality game fish. Plans are underway to construct an effective water control structure and fish barrier system. Partners hope to

install the needed infrastructure by fall 2011, temporarily drain the lake from spring 2012 to fall 2013, and then restock the lake in 2014.

### **Recently Completed Shallow Lake Projects**

**Center Lake, Dickinson County** – Due to strong local support, the damaged and ineffective Center Lake outlet culverts were replaced at a lower elevation with a variable-crest concrete water control structure during fall 2008. Improvements to in-lake and downstream outlet channels were also completed. Collectively, these improvements will reduce flooding impacts on the 264-acre Center Lake and will allow for beneficial partial drawdowns on Center Lake and two associated Type III wetlands. Establishment of aquatic vegetation in the lake and wetlands will improve fish and wildlife habitat and will enhance water quality in Center Lake and its downstream neighbor, West Lake Okoboji.

This work on the lake outlet is only a small part of a comprehensive plan being developed for this lake. Storm water modeling and prioritization of other watershed inputs are underway. The Center Lake Improvement and Protection Association has collaborated with local agencies to develop a lake restoration plan to reverse recent declines in water quality and received a \$15,000 local grant to cost-share improvements to the outlet.

**Dan Green Slough, Clay County** – The donation of a key tract of land in 2008 facilitated the installation of a pump system and fish barrier on the 311-acre Dan Green Slough during fall 2008 and winter 2008-09. A subsequent temporary draw down of the basin during spring and summer 2009 resulted in the eradication of rough fish, the consolidation of bottom sediments, and the re-establishment of over 250 acres of soft stem bulrush and other beneficial emergent aquatic plants. The basin was kept partially dry during the 2010 growing season to allow for the continued growth of emergent vegetation and the establishment of submergent plants. Weather pending, the basin will be brought to full pool during fall 2010 or spring 2011.

A local bird surveyor recently informed the DNR that the wading and shore bird use was incredible this past year. He stated that he personally observed every shore/wading bird that was expected to be in this region of Iowa plus a few rare ones that were not expected. The mudflats had a tremendous response to emergents (i.e. softstem bulrush) and once water was returned, submergents (i.e. sago pondweed) flourished. Dense vegetation provided excellent fall habitat for migrating ducks. There was heavy duck hunter use throughout the season and many had a good to excellent luck.

**Diamond Lake, Dickinson County** - During winter 2006-07, the initial efforts to enhance this 166-acre basin were completed with the installation of a drawdown tile designed to allow the lake to be periodically dewatered to eliminate rough fish and to allow for the germination of aquatic plants and consolidation of bottom sediments. Excessive rain in late summer 2007 prevented a successful drawdown. A winter rotenone project in January 2008 eliminated the few remaining rough fish in the lake. A successful drawdown was realized in summer 2008 through the continuous use of the drawdown tile and the temporary use of an auxiliary diesel pump, which was purchased with Lake Restoration funds. The outlet of the lake was also lowered about 0.5' to a more natural elevation, which will prevent excessive shoreline erosion, tree toppling and should provide for water levels more conducive to aquatic plant growth. Despite a cool spring, regrowth of vegetation did well over the summer.

***Aerial photo with Diamond Lake at approximately half pool.***



***Diamond Lake water clarity post renovation***

A “reef” fish barrier was installed during winter 2008-09 to prevent the reinfestation of rough fish into Diamond Lake. The barrier is best described as a flow-through rock weir. At present, the lake contains exceptionally clear water and has diversified stands of emergent vegetation on the lake’s perimeter and submergent vegetation within the lake. Migratory bird use has been excellent with several thousand shore birds and waterfowl observed on the lake during early fall 2009. Fingerling yellow perch were stocked spring 2009 and northern pike will be stocked in 2010. Weather permitting; the basin will be brought to full pool during spring 2010.

National Fish Habitat Action Plan unveiled Diamond Lake as one of its 2010 10 "Waters to Watch" list, a collection of rivers, streams, lakes and watershed systems that will benefit from strategic conservation efforts to protect, restore or enhance their current condition. These waters represent a snapshot of current conservation efforts that the Action Plan is undertaking to provide cleaner and healthier habitats for the many fish and wildlife species and people who call these areas home.

The Diamond Lake project focused on improving water quality by shifting the lake to a clear water state using water-level management to consolidate bottom sediments, re-establish aquatic plants, and control common carp populations. The restoration of Diamond Lake is Iowa's inaugural shallow lake restoration project providing resource management professionals with experience and expertise for managing shallow lakes. The project also provides stakeholders a demonstration of the restoration potential for other shallow lakes. Water quality, plant abundance and diversity still good. Perch and Northern Pike growth is excellent. First time in recent history that diving ducks were found using the lake in spring and

fall, which is indicative of a good food source. Hunters hunted ducks and geese on the lake this fall and had good success.

**Four Mile Lake, Emmett County** – A partial drawdown initiated during summer 2008 allowed for the successful addition of a fish barrier and in-lake drawdown channels in Four Mile Lake during fall 2008. Continuation of the drawdown summer 2009 allowed for the eradication of rough fish, the consolidation



of bottom sediments, and the establishment of beneficial submergent and emergent vegetation in the 200-acre basin. Presently, the basin is at full pool, contains very clear water, supports robust populations of submerged plants and associated invertebrate populations, and provided excellent migratory bird habitat. It is expected that during spring 2010, the restored Four Mile Lake will fulfill its intended function of becoming a “stepping stone” lake by providing exceptional migratory habitat for diving ducks and other migratory water birds that rely on healthy aquatic environments to complete their life cycles.

**Jemmerson Slough, Dickinson County** - Located at the top end of an important West Lake Okoboji watershed, the 932-acre Jemmerson Slough complex is an important water quality, wildlife habitat, and public recreation/education area. In 2006, Phase I of the Jemmerson Slough Enhancement Project was completed with the installation of two water control structures and two outlet improvements. During fall 2008, the second and final phase was completed with the installation of a pump station, new gravity-flow water control structure, and fish barrier. Intensive efforts were made during construction to prevent water quality problems in West Lake Okoboji and other downstream basins. Jemmerson Slough was temporarily dewatered during summer 2009 to rid the basin of rough fish and to allow for the re-establishment of aquatic emergent vegetation like soft stem bulrush, cattails, and other important plants. In 2010, water levels were brought up slowly to promote the continued growth of existing emergent plants and to provide a favorable environment for the growth of beneficial submergent plants like sago pondweed. Once re-hydrated, over 200 wetland acres will send cleaner water to West Lake Okoboji and other downstream basins, and will provide excellent production and migratory wildlife habitat. Excellent vegetation response and water quality throughout summer and fall. We established a ~600-acre waterfowl refuge in 2009; duck use was good during that fall and even better during fall 2010, with ~5,000 ducks and geese feeding and resting in the refuge. Development of small wetlands on recently acquired properties near the Jemmerson Slough Refuge should provide excellent duck hunting opportunities in the near future.

## **Lake Restoration Program (LRP) – Other Program Activities**

### **Meetings with Local Leaders and Stakeholders**

In accordance with Section 26 of House File 2782: “The department shall meet with representatives of communities where lakes on the initial list are located to provide an initial lake restoration assessment and to explain the process and criteria for receiving lake restoration funding”.

The IDNR has established local stakeholder groups or held initial technical field staffs planning. We have had these discussions with a number of active or planned lake/watershed improvement projects. Including; Big Creek Lake, Blackhawk Lake, Carter Lake, Clear Lake, Easter Lake, Green Valley, Lake Darling, Lake Geode, Lake Manawa, Lake Wapello, Lizard Lake, Lost Island Lake, Lower Gar Lake, Prairie Rose Lake, Rathbun Lake, Rock Creek Lake, and Storm Lake.

Potential Future Projects that need Meetings with Local Leaders and Stakeholders:

Badger Creek Lake (Madison Co.), Central Park Lake (Jones Co.), Diamond Lake (Poweshiek Co.), Hannen Lake (Benton Co.), Kent Park Lake (Johnson Co.), and Lake of the Hills (Scott Co).

**Lake Restoration Prioritization Process**

The Lake Restoration Program initially ranked 128 public lakes for lake restoration priorities in 2006. A group of thirty-five lakes, considered highest priority for restoration, was established and served as a starting point for identifying potential lake restoration projects. Ranking indices used lake water quality data and watershed characteristics to create groups of good, fair, or poor lakes and watersheds. The department used these descriptions to categorize lakes into management action groups.

IDNR annually reviews the list of thirty-five lakes to determine which lakes should proceed with lake restoration. Until watershed best management practices protect the lake, restoration work cannot move forward, therefore lakes with well-documented watershed protections are the best candidates for restoration.

The other necessary ingredient to begin lake restoration is local commitment. In order to better document how lake restoration will benefit Iowa we will use cost benefit analysis, as well as identifying non-economic benefits to people and our natural resources. Computing and documenting the economic benefits, recreation benefits, health benefits, and natural resource/environmental benefits of lake improvements will be a great asset to the lake restoration process. This information will also go a long way in communicating the need of lake restoration projects to local communities and the legislature.

**Inquiries from Stakeholders of Lakes not on the Priority List**

Also in accordance with HF2782, “Communities with lakes not included on the initial list may petition the director of the department for a preliminary lake restoration assessment and explanation of the funding process and criteria”.

Local stakeholders from Lake Rathbun (Appanoose Co.), Lost Island Lake (Palo Alto Co.) and Summit Lake (Union Co.) have contacted the IDNR to consider their respective lakes for a restoration project. Rathbun Reservoir (Appanoose Co.) is an 11,000 acre lake in south-central Iowa that is one our most significant state recreational destinations. It is distinct from several of our other large reservoirs, Saylorville, Coralville and Red Rock in that its watershed to lake ratio is only 37:1 and has great potential to maintain and improve lake water quality with a combination of watershed and lake restoration alternatives. Lost Island Lake (Palo Alto Co.) is a 1,000 ac. natural lake in northwest Iowa that is not meeting its water quality and recreational potential. The Iowa IDNR currently owns 23 percent of the watershed and proposes watershed work in parallel with current restoration efforts described in the Lost Island Lake section of this report.

Several additional restoration projects have been included to the program in the past: Badger Creek Lake (Madison Co.), Hawthorn Lake (Mahaska Co.), Lake of Three Fires (Taylor Co.), Lake Wapello (Davis Co.), Little River Lake (Decatur Co.) Lost Grove Lake (Scott Co.), Mariposa Lake (Jasper Co.), Meadow Lake (Adair Co.) and Swan Lake (Carroll Co.). Meadow Lake required less than \$135K from the LR Program and Section 319 Program to achieve success; Hawthorn Lake will utilize WIRB and LRP funding to complete the project; Little River Lake will also be included into the program; however, in-lake

work is several years off and will require significant watershed improvements before the in-lake work can begin.

Three lake restoration projects were denied entry into the LR Program: Sands Timber (Taylor Co.), South Twin Lake (Calhoun Co.), and Summit Lake (Union Co.). For South Twin Lake, the DNR recommends shallow lakes management with no dredging. The DNR is working cooperatively with local groups at Summit Lake to assist in a technical capacity and to help fund efforts associated with the ability to drain Summit Lake, future elimination of rough fish from the system and modification of the spillway to prevent migration of these fish back into Summit Lake. The City of Creston recently applied and was successful in obtaining a WIRB Grant to fund \$493,117 of a \$678,590 project. The WIRB project will focus on watershed improvements, streambank and lake shoreline stabilization and stormwater improvements.

### **Local, State and Federal Partnerships**

In order to achieve lake restoration goals it is critical that the IDNR form effective watershed partnerships. This includes partnerships at the local level, but also at administrative levels of government. Local, state and federal programs offer a multitude of programs for financial assistance to landowners for soil conservation and other water quality protection practices. The strategy pursued in the lake restoration program will be to seek out key individuals with expertise at the local level and the program administration level. This expertise will maximize access to financial incentives for landowner participation in watershed improvement and lake restoration projects. Listed below are several examples of potential partners in watershed improvement and lake restoration.

#### Local:

- Chamber of Commerce
- City/Town Mayors and Councils
- Conservation and Recreation Clubs and Organizations
- County Board of Supervisors
- County Conservation Board
- IDNR Field Offices (Environmental Services, Fisheries, Forestry, Parks, Wildlife)
- IDALS/ Division of Soil Conservation – Project Coordinators
- IOWATER Volunteers / Educators / Interested Citizens
- Lake Associations / Groups
- NRCS Soil and Water Conservation Districts (SWCD)
- Private Landowners
- USDA Resource Conservation and Development (RC&D)
- Watershed Organizations

#### State:

- Agribusiness and Community Organizations
- IDALS/ Division of Soil Conservation
- Iowa Department of Transportation
- Iowa Environmental Council
- Iowa Farm Bureau
- Iowa Natural Heritage Foundation

#### Federal:

- U. S. Environmental Protection Agency
- U.S. Fish and Wildlife Service
- Natural Resources Conservation Service
- U.S. Army Corps of Engineers
- U.S. Geological Survey

## Communication Tools and Strategies

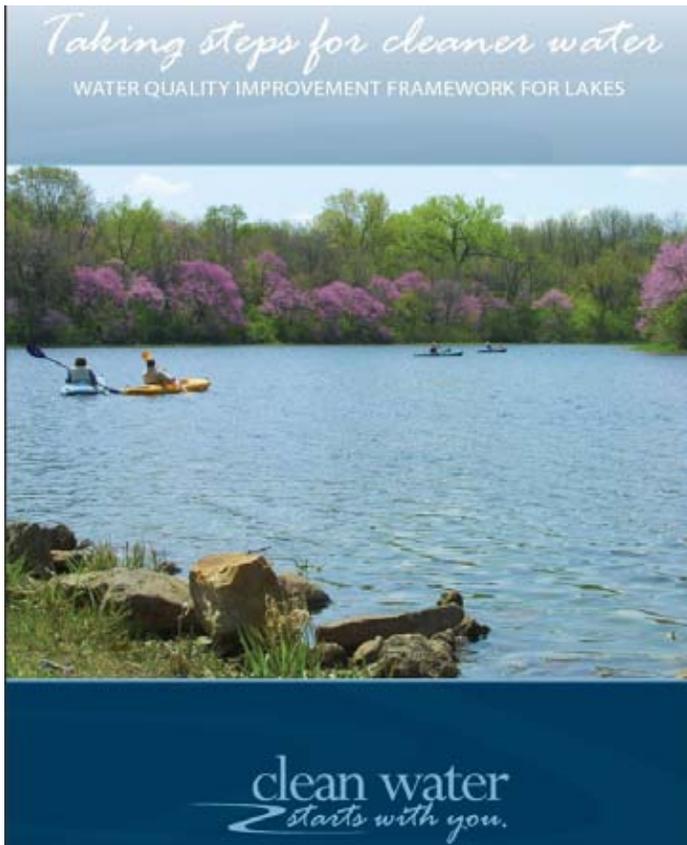
The IDNR, in cooperation with Iowa Department of Agriculture Land Stewardship (IDALS), has worked to develop a holistic approach to locally led watershed projects and information to help guide communities through the process of water quality improvement projects.

Watershed Project Planning Protocol

<http://www.iowadnr.gov/water/watershed/files/protocolguide.pdf>

Water Quality Improvement Framework for Lakes

[http://www.iowadnr.gov/water/watershed/files/lake\\_frame.pdf](http://www.iowadnr.gov/water/watershed/files/lake_frame.pdf)



People will find these brochures useful as handouts at meetings. In addition to brochure type handouts, a number of communication and outreach tools for the public and lake stakeholders will be considered as deemed appropriate, including: display/kiosk, lake restoration tool kit and workshop, newsletters, opinion surveys, web site. For example, the Lakes Program developed a one-page handout that summarizes the Lake Restoration Process. This has proved to be a useful tool in communicate the important aspects of the program to the public (Appendix D).

## Appendix A. House File 2782 - Enrolled

PAG LIN

1 1 HOUSE FILE 2782

1 2

1 3 AN ACT

1 4 RELATING TO AND MAKING APPROPRIATIONS TO STATE DEPARTMENTS

1 5 AND AGENCIES FROM THE REBUILD IOWA INFRASTRUCTURE FUND,

1 6 ENVIRONMENT FIRST FUND, TOBACCO SETTLEMENT TRUST FUND,

1 7 VERTICAL INFRASTRUCTURE FUND, THE ENDOWMENT FOR IOWA'S

1 8 HEALTH RESTRICTED CAPITALS FUND, THE TECHNOLOGY REINVEST-

1 9 MENT FUND, THE ENDOWMENT FOR IOWA'S HEALTH ACCOUNT, THE

1 10 PUBLIC TRANSIT INFRASTRUCTURE GRANT FUND, THE IOWA GREAT

1 11 PLACES PROGRAM FUND, AND RELATED MATTERS AND PROVIDING

1 12 IMMEDIATE, RETROACTIVE, AND FUTURE EFFECTIVE DATES.

1 13

1 14 BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF IOWA:

31 13 Sec. 26. NEW SECTION. 456A.33B LAKE RESTORATION PLAN AND

31 14 REPORT.

31 15 1. It is the intent of the general assembly that the

31 16 department of natural resources shall develop annually a lake

31 17 restoration plan and report that shall be submitted to the

31 18 joint appropriations subcommittee on transportation,

31 19 infrastructure, and capitals and the legislative services

31 20 agency by no later than January 1 of each year. The plan and

31 21 report shall include the department's plans and

31 22 recommendations for lake restoration projects to receive

31 23 funding consistent with the process and criteria provided in

31 24 this section, and shall include the department's assessment of

31 25 the progress and results of projects funded with moneys

31 26 appropriated under this section.

31 27 The department shall recommend funding for lake restoration

31 28 projects that are designed to achieve the following goals:

31 29 a. Ensure a cost-effective, positive return on investment

31 30 for the citizens of Iowa.

31 31 b. Ensure local community commitment to lake and watershed

31 32 protection.

31 33 c. Ensure significant improvement in water clarity,

31 34 safety, and quality of Iowa lakes.

31 35 d. Provide for a sustainable, healthy, functioning lake

32 1 system.

32 2 e. Result in the removal of the lake from the impaired

32 3 waters list.

32 4 2. The process and criteria the department shall utilize

32 5 to recommend funding for lake restoration projects shall be as

32 6 follows:

32 7 a. The department shall develop an initial list of not

32 8 more than thirty-five significant public lakes to be

32 9 considered for funding based on the feasibility of each lake

32 10 for restoration and the use or potential use of the lake, if

32 11 restored. The list shall include lake projects under active

32 12 development that the department shall recommend be given

32 13 priority for funding so long as progress toward completion of

32 14 the projects remains consistent with the goals of this

32 15 section.

32 16 b. The department shall meet with representatives of

32 17 communities where lakes on the initial list are located to

32 18 provide an initial lake restoration assessment and to explain

32 19 the process and criteria for receiving lake restoration

32 20 funding. Communities with lakes not included on the initial

32 21 list may petition the director of the department for a

32 22 preliminary lake restoration assessment and explanation of the

32 23 funding process and criteria. The department shall work with

32 24 representatives of each community to develop a joint lake

32 25 restoration action plan. At a minimum, each joint action plan

32 26 shall document the causes, sources, and magnitude of lake

32 27 impairment, evaluate the feasibility of the lake and watershed  
32 28 restoration options, establish water quality goals and a  
32 29 schedule for attainment, assess the economic benefits of the  
32 30 project, identify the sources and amounts of any leveraged  
32 31 funds, and describe the community's commitment to the project,  
32 32 including local funding. The community's commitment to the  
32 33 project may include moneys to fund a lake diagnostic study and  
32 34 watershed assessment, including development of a TMDL (total  
32 35 maximum daily load).

33 1 c. Each joint lake restoration plan shall comply with the  
33 2 following guidelines:

33 3 (1) Biologic controls will be utilized to the maximum  
33 4 extent, wherever possible.

33 5 (2) If proposed, dredging of the lake will be conducted to  
33 6 a mean depth of at least ten feet to gain water quality  
33 7 benefits unless a combination of biologic and structural  
33 8 controls is sufficient to assure water quality targets will be  
33 9 achieved at a shallower average water depth.

33 10 (3) The costs of lake restoration will include the  
33 11 maintenance costs of improvements to the lake.

33 12 (4) Delivery of phosphorous and sediment from the  
33 13 watershed will be controlled and in place before lake  
33 14 restoration begins. Loads of phosphorous and sediment, in  
33 15 conjunction with in-lake management, will meet or exceed the  
33 16 following water quality targets:

33 17 (a) Clarity. A four-and-one-half-foot secchi depth will  
33 18 be achieved fifty percent of the time from April 1 through  
33 19 September 30.

33 20 (b) Safety. Beaches will meet water quality standards for  
33 21 recreational use.

33 22 (c) Biota. A diverse, balanced, and sustainable aquatic  
33 23 community will be maintained.

33 24 (d) Sustainability. The water quality benefits of the  
33 25 restoration efforts will be sustained for at least fifty  
33 26 years.

33 27 d. The department shall evaluate the joint action plans  
33 28 and prioritize the plans based on the criteria required in  
33 29 this section. The department's annual lake restoration plan  
33 30 and report shall include the prioritized list and the amounts  
33 31 of state and other funding the department recommends for each  
33 32 lake restoration project. The department may seek public  
33 33 comment on its recommendations prior to submitting the plan

33 34 and report to the general assembly.

## **Appendix B. Significant, Publicly-owned Lakes - Defined**

### **Bachmann (1980). “Clean Lakes Classification Study of Iowa’s Lakes for Restoration”.**

Authors: Roger W. Bachmann, Mark R. Johnson, Marianne V. Moore, Terry A. Noonan

Iowa Cooperative Fisheries Research Unit  
Iowa State University, Department of Animal Ecology

#### Introduction

Approximately 175 lakes and reservoirs were considered by the Iowa Conservation Commission (ICC) staff for inclusion into the list of lakes to be surveyed and classified. Many of these 175 lakes are contained in “Iowa Fishing Guide”, a publication of the ICC. Time and money precluded survey and classification of all the lakes; therefore, the list was reduced to include only significant lakes in public ownership.

#### Significant Lakes – Defined and Explained

Significant publicly-owned lakes were defined as those lakes which are principally maintained for public use containing a minimum surface area of 10 acres and capable of supporting fish stocks of at least 200 pounds per acre. Species diversity in water bodies containing less than 10 acres is habitually low resulting in a fish density with minimal potential for maximum sustained yields via sport or foodfish fisheries. Shallow lakes, which are most characteristic of wetlands and marsh-like habitat that are subject to chronic and extensive fish winterkills, were excluded from the survey. Establishment of productive fish populations is hopeless where massive mortality results from the lowering of life supporting oxygen concentrations under ice cover each winter. Federal-owned on-stream impoundment constructed for floodwater supplies were excluded because of Clean Water Act regulations. Multi-purpose lakes providing domestic water supply as only one of several major management objectives were included in the study. Impoundments containing a watershed to surface area ration greater than 200:1 acres were omitted from the list since they are mainly on-stream impoundments formed by lowhead dams and emulate riverine habitat rather than lake environment.

#### **Section 305 (b) report (2000)**

Section 314 (a) (2) of the federal Clean Water Act of 1987 requires each state to include in its biennial Section 305 (b) report specific information on the water quality conditions and trends of the state’s “significant, publicly-owned lakes,” as well as a description of the state’s lake protection and restoration programs. In Iowa, “significant, publicly-owned lakes” are defined as those publicly-owned lakes that meet all of the following criteria:

- are maintained principally for public use;
- are capable of supporting fish stocks of at least 200 pounds per acre;
- have a surface water area of at least 10 acres;
- have a watershed to lake surface area ratio of less than 200:1;
- are not shallow marsh-like lakes, federal flood control impoundments, or used solely as water supply reservoirs.

As such, the 115 significant, publicly-owned lakes (SPOLs) represent a subset of the Iowa’s approximately 5,400 lakes, ponds, and reservoirs.

## Appendix C. Significant, Publicly-owned Lakes

Initial list of thirty-five significant publicly-owned lakes prioritized for funding based on the feasibility of each lake for restoration and the use or potential use of the lake, if restored. The list included lake projects under active development that the department recommended be given priority for funding so long as progress toward completion of the projects remained consistent with the goals of the program.

<b>LAKE NAME</b>	<b>COUNTY</b>
Arbor Lake	POWESHIEK
Big Creek Lake	POLK
Black Hawk Lake	SAC
Blue Lake	MONONA
Brushy Creek Lake	WEBSTER
Carter Lake	POTTAWATTAMIE
Central Park Lake	JONES
Clear Lake	CERRO GORDO
Crystal Lake	HANCOCK
Diamond Lake	POWESHIEK
Easter Lake	POLK
Five Island Lake	PALO ALTO
George Wyth Lake	BLACK HAWK
Green Valley Lake	UNION
Hannen Lake	BENTON
Hickory Grove Lake	STORY
Kent Park Lake	JOHNSON
Lake Ahquabi	WARREN
Lake Anita	CASS
Lake Darling	WASHINGTON
Lake Geode	HENRY
Lake Keomah	MAHASKA
Lake Macbride	JOHNSON
Lake Manawa	POTTAWATTAMIE
Lake of the Hills	SCOTT
Little Wall Lake	HAMILTON
Lower Gar Lake	DICKINSON
Pleasant Creek Lake	LINN
Prairie Rose Lake	SHELBY
Red Haw Lake	LUCAS
Rock Creek Lake	JASPER
Silver Lake	DELAWARE
Storm Lake	BUENA VISTA
Union Grove Lake	TAMA
Viking Lake	MONTGOMERY

## Appendix C. Significant, Publicly-owned Lakes

The following eleven lakes were not included on the initial list of thirty-five significant publicly-owned lakes prioritized for funding. They have since been added to the priority list after communities have successfully petitioned the director of the department or were prioritized by the department based on the feasibility of the lake for restoration and the use or potential use of the lake, if restored.

LAKE NAME	COUNTY
Badger Creek Lake	MADISON
Hawthorn Lake	MAHASKA
Lake of Three Fires	TAYLOR
Lake Wapello	DAVIS
Little River Lake	DECATUR
Lost Grove Lake	SCOTT
Lost Island Lake	PALO ALTO
Mariposa Lake	JASPER
Meadow Lake	ADAIR
Rathbun Reservoir	APPANOOSE
Swan Lake	CARROLL

The following lakes are the additional eighty-two lakes recognized by the Iowa Department of Natural Resources Lake Restoration Program as Significant Publicly-Owned Lakes.

LAKE NAME	COUNTY
Arrowhead Lake	SAC
Arrowhead Pond	POTTAWATTAMIE
Avenue of the Saints Pond	BREMER
Badger Lake	WEBSTER
Beaver Lake	DALLAS
Beeds Lake	FRANKLIN
Big Spirit Lake	DICKINSON
Bob White Lake	WAYNE
Briggs Woods Lake	HAMILTON
Browns Lake	WOODBURY
Casey Lake (aka Hickory Hills Lake)	TAMA
Center Lake	DICKINSON
Cold Springs Lake	CASS
Crawford Creek Impoundment	IDA
DeSoto Bend	HARRISON
Dog Creek (Lake)	OBRIEN
Don Williams Lake	BOONE
East Lake (Osceola)	CLARKE
East Okoboji Lake	DICKINSON
Eldred Sherwood Lake	HANCOCK
Fogle Lake S.W.A.	RINGGOLD
Green Belt Lake	BLACK HAWK
Green Castle Lake	MARSHALL
Greenfield Lake	ADAIR
Hooper Area Pond	WARREN
Indian Lake	VAN BUREN
Ingham Lake	EMMET
Iowa Lake	IOWA
Lacey Keosauqua Park Lake	VAN BUREN

<b>LAKE NAME</b>	<b>COUNTY</b>
Lake Cornelia	WRIGHT
Lake Hendricks	HOWARD
Lake Icaria	ADAMS
Lake Meyer	WINNESHIEK
Lake Miami	MONROE
Lake Pahoja	LYON
Lake Smith	KOSSUTH
Lake Sugema	VAN BUREN
Little Sioux Park Lake	WOODBURY
Little Spirit Lake	DICKINSON
Littlefield Lake	AUDUBON
Lower Pine Lake	HARDIN
Manteno Park Pond	SHELBY
Meyer Lake	BLACK HAWK
Mill Creek Lake	OBRIEN
Minnewashta Lake	DICKINSON
Mitchell	BLACK HAWK
Moorhead Park Pond	IDA
Mormon Trail Lake	ADAIR
Nelson Park Lake	CRAWFORD
Nine Eagles Lake	DECATUR
North Twin Lake	CALHOUN
Oldham Lake	MONONA
Orient Lake	ADAIR
Otter Creek Lake	TAMA
Ottumwa Lagoon	WAPELLO
Pierce Creek Pond	PAGE
Poll Miller Park Lake	LEE
Roberts Creek Lake	MARION
Rodgers Park Lake	BENTON
Silver Lake	DICKINSON
Silver Lake	WORTH
Silver Lake	PALO ALTO
Slip Bluff Lake	DECATUR
South Prairie Lake	BLACK HAWK
Spring Lake	GREENE
Springbrook Lake	GUTHRIE
Thayer Lake	UNION
Three Mile Lake	UNION
Trumbull Lake	CLAY
Tuttle Lake	EMMET
Twelve Mile Creek Lake	UNION
Upper Gar Lake	DICKINSON
Upper Pine Lake	HARDIN
Volga Lake	FAYETTE
West Lake (Osceola)	CLARKE
West Okoboji Lake	DICKINSON
White Oak Lake	MAHASKA
Williamson Pond	LUCAS
Willow Lake	HARRISON
Wilson Park Lake	TAYLOR
Windmill Lake	TAYLOR
Yellow Smoke Park Lake	CRAWFORD

## Appendix D. Lake Restoration Prioritization Process and Program

### Key Concepts and Facts

- Six of ten Iowans visit lakes each year; they will visit these lakes eight times during the year
- Iowans prefer lakes with better water quality
- Statewide our lakes generate \$1.6 billion in annual spending by Iowans
- A lake is a reflection of both watershed and lake management
- Lake restoration starts in the watershed; it relies on strong local involvement and voluntary participation of landowners

### Current Prioritization and Program

- Modeled after the Federal Clean Lakes Program established in the 1970s
- DNR provided the 2006 legislature with a priority list of 35 lake candidates
  - Priorities based on a 5-year ISU/DNR assessment of water quality
  - Technical feasibility of restoration
  - Potential economic benefits
  - Use by Iowans, and local interest/involvement
- Projects require a lake and watershed restoration assessment and plan
- Projects require local resources in combination with state and federal funds
- Local groups can petition to have their lake added to the priority list
- Project Status
  - 8 Completed or near completion
  - 27 In progress
  - 11 Planning or initial public outreach stage
- DNR provides an annual progress report to the legislature that includes a work plan and budget

### Water Quality Goals

Stipulated in 2006 State Legislation (HF2782):

- Delivery of phosphorous and sediment from the watershed will be controlled before lake restoration begins
- Shallow lakes management will be considered among options for restoration
- Water quality targets
  - Clarity. 4 ½ foot secchi disc transparency 50% of the time from April – September
  - Biota. A diverse, balanced, and sustainable aquatic community must be maintained
  - Impairment. Water quality impairments must be eliminated
  - Sustainability. The water quality and public use benefits must be sustained for 50 years

### Lake Restoration Program Budget

- 2007 funding \$9.6 Million
- 2008 funding \$8.6 Million
- 2009 / 2010 funding \$12.8 Million
- 2011 funding \$10.0 Million

### DNR Contacts

Mike McGhee (515-281-6281) [mike.mcgee@dnr.iowa.gov](mailto:mike.mcgee@dnr.iowa.gov)  
George Antoniou (515-281-8042) [george.antoniou@dnr.iowa.gov](mailto:george.antoniou@dnr.iowa.gov)

**Web Page:** <http://www.iowadnr.gov/water/lakerestoration/>



**IA FISH AND GAME PROTECTION FUND REPORT**  
**APPENDIX F - Federal Codes and Rules for Funding Use**

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## **Federal Codes and Rules**

### **1. Federal Wildlife Act and Fish Restoration Act Rule guiding USC 16**

**Authority:** 16 U.S.C. 777–777n; 16 U.S.C. 669–669k; 18 U.S.C. 701.

**Source:** 47 FR 22539, May 25, 1982, unless otherwise noted.

Note: The information collection requirements in this part have been approved by the Office of Management and Budget under control number 1018–0048.

#### **§ 80.1 Definitions.**

As used in this part, the following terms have these meanings:

*Common horsepower.* Any size motor that can be reasonably accommodated on the body of water slated for development.

*Comprehensive fish and wildlife management plan.* A document describing the State's plan for meeting the long-range needs of the public for fish and wildlife resources, and the system for managing the plan.

*Director.* The Director of the Service, or his or her designated representative. The Director serves as the Secretary's representative in matters relating to the administration and execution of the Wildlife and Sport Fish Restoration Acts.

*Project.* One or more related undertakings necessary to fulfill a need or needs, as defined by the State, and consistent with the purposes of the appropriate Act.

*Regional Director.* The regional director of any region of the Service, or his or her designated representative.

*Resident angler.* One who fishes within the same State where legal residence is maintained.

*Secretary.* The Secretary of the Interior or his or her designated representative.

*Service.* The U.S. Fish and Wildlife Service.

*State.* Any State of the United States and the Commonwealths of Puerto Rico and the Northern Mariana Islands, the District of Columbia, and the territories of Guam, the U.S. Virgin Islands, and American Samoa. References to “the 50 States” pertain only to the 50 States of the United States and do not include these other six areas.

*State fish and wildlife agency.* The agency or official of a State designated under State law or regulation to carry out the laws of the State in relation to the management of fish and wildlife resources of the State. Such an agency or official also designated to exercise collateral responsibilities, e.g., a State Department of Natural Resources, will be considered the State fish and wildlife agency only when exercising the responsibilities specific to the management of the fish and wildlife resources of the State.

**IA FISH AND GAME PROTECTION FUND REPORT**  
**APPENDIX F - Federal Codes and Rules for Funding Use**

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*Wildlife and Sport Fish Restoration Acts or the Acts.* Pittman-Robertson Wildlife Restoration Act of September 2, 1937, as amended (50 Stat. 917; 16 U.S.C. 669–669k), and the Dingell-Johnson Sport Fish Restoration Act of August 9, 1950, as amended (64 Stat. 430; 16 U.S.C. 777–777n).

*Wildlife and Sport Fish Restoration Program Funds.* Funds provided under the Acts.

[73 FR 43127, July 24, 2008]

**§ 80.2 Eligibility.**

Participation in the benefits of the Acts is limited to State fish and wildlife agencies as specified below:

- (a) Dingell-Johnson Sport Fish Restoration—Any of the States as defined in §80.1.
- (b) Pittman-Robertson Wildlife Restoration—Any of the States as defined in §80.1, except the District of Columbia.

[47 FR 22539, May 25, 1982, as amended at 50 FR 21448, May 24, 1985; 73 FR 43128, July 24, 2008]

**§ 80.3 Assent legislation.**

A State may participate in the benefits of the Act(s) only after it has passed legislation which assents to the provisions of the Acts and has passed laws for the conservation of fish and wildlife including a prohibition against the diversion of license fees paid by hunters and sport fishermen to purposes other than administration of the fish and wildlife agency. Subsequent legislation which amends these state laws shall be subject to review by the Secretary. If the legislation is found contrary to the assent provisions, the State shall become ineligible.

**§ 80.4 Diversion of license fees.**

Revenues from license fees paid by hunters and fishermen shall not be diverted to purposes other than administration of the State fish and wildlife agency.

(a) Revenues from license fees paid by hunters and fishermen are any revenues the State receives from the sale of licenses issued by the State conveying to a person the privilege to pursue or take wildlife or fish. For the purpose of this rule, revenue with respect to license sales by vendors, is considered to be the net income to the State after deducting reasonable vendor fees or similar amounts retained by sales agents. License revenues include income from:

- (1) General or special licenses, permits, stamps, tags, access and recreation fees or other charges imposed by the State to hunt or fish for sport or recreation.
- (2) Sale, lease, rental, or other granting of rights of real or personal property acquired or produced with license revenues. Real property includes, but is not limited to, lands, building, minerals, energy resources, timber, grazing, and animal products. Personal property includes, but is not limited to, equipment, vehicles, machine, tools, and annual crops.

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- (3) Interest, dividends, or other income earned on license revenues.
- (4) Project reimbursements to the States to the extent that license revenues originally funded the project for which the reimbursement is being made.
- (b) For purposes of this rule, administration of the State fish and wildlife agency include only those functions required to manage the fish and wildlife-oriented resources of the State for which the agency has authority under State law.
- (c) A diversion of license fee revenues occurs when any portion of license revenues is used for any purpose other than the administration of the State fish and wildlife agency.
- (d) If a diversion of license revenues occurs, the State becomes ineligible to participate under the pertinent Act from the date the diversion is declared by the Director until:
- (1) Adequate legislative prohibitions are in place to prevent diversion of license revenue, and
  - (2) All license revenues or assets acquired with license revenues are restored, or an amount equal to license revenue diverted or current market value of assets diverted (whichever is greater) is returned and properly available for use for the administration of the State fish and wildlife agency.
- (e) Federal funds obligated for projects approved prior to the date a diversion is declared remain available for expenditure on such projects without regard to the intervening period of the State's ineligibility.

[54 FR 15209, Apr. 17, 1989, as amended at 73 FR 43128, July 24, 2008]

**§ 80.5 Eligible undertakings.**

The following are eligible for funding under the Acts:

- (a) *Pittman-Robertson Wildlife Restoration Act.* (1) Projects having as their purpose the restoration, conservation, management, and enhancement of wild birds and wild mammals, and the provision for public use of and benefits from these resources.
- (2) Projects having as their purpose the education of hunters and archers in the skills, knowledges, and attitudes necessary to be a responsible hunter or archer.
- (b) *Dingell-Johnson Sport Fish Restoration Act.* (1) Projects having as their purpose the restoration, conservation, management, and enhancement of sport fish, and the provision for public use and benefits from these resources. Sport fish are limited to aquatic, gill-breathing, vertebrate animals, bearing paired fins, and having material value for sport or recreation.
- (2) Additional funds resulting from expansion of the Sport Fish Restoration Program must be added to existing State fishery program funds available from traditional sources and not as a substitute therefor.

[47 FR 22539, May 25, 1982, as amended at 50 FR 21448, May 24, 1985; 73 FR 43128, July 24, 2008]

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**§ 80.6 Prohibited activities.**

The following are not eligible for funding under the Acts, except when necessary for the accomplishment of project purposes as approved by the regional director.

- (a) Law enforcement activities conducted by the State to enforce the fish and game regulations.
- (b) Public relations activities conducted to promote the State fish and wildlife agency.

**§ 80.7 Appeals.**

Any difference of opinion over the eligibility of proposed activities or differences arising over the conduct of work may be appealed to the Director. Final determination rests with the Secretary.

**§ 80.8 Availability of funds.**

Funds are available for obligation or expenditure during the fiscal year for which they are apportioned and until the close of the succeeding fiscal year except as provided in §80.24. For the purposes of this section, funds become available when the Regional Director approves the grant.

[73 FR 43128, July 24, 2008]

**§ 80.9 Notice of desire to participate.**

Any State fish and wildlife agency desiring to avail itself of the benefits of the Acts shall notify the Secretary within 60 days after it has received a certificate of apportionment of funds available to the State. Notification to the Secretary may be accomplished by either of the following methods. In either method, the document must be signed by a State official authorized to commit the State to participation under the Act(s).

- (a) Submitting to the regional director within the 60-day period a letter stating the desire of the State to participate in the Act(s); or,
- (b) Having an approved Application for Federal Assistance which contains plans for the use of Wildlife and Sport Fish Restoration Program funds during the period of the apportionment.

[47 FR 22539, May 25, 1982, as amended at 73 FR 43128, July 24, 2008]

**§ 80.10 State certification of licenses.**

(a) To ensure proper apportionment of Federal funds, the Service requires that each director of a State fish and wildlife agency:

(1) Specify a license certification period that:

- (i) Is 12 consecutive months in length;

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- (ii) Is either the State's fiscal year or license year;
  - (iii) Is consistent from year to year; and
  - (iv) Ends no less than 1 year and no more than 2 years before the beginning of the Federal fiscal year that the apportioned funds first become available for expenditure;
- (2) Obtain the Director's approval before changing the State-specified license certification period; and
- (3) Annually provide to the Service the following data:
- (i) The number of persons who hold paid licenses that authorize an individual to hunt in the State during the State-specified license certification period; and
  - (ii) The number of persons who hold paid licenses that authorize an individual to fish in the State during the State-specified license certification period.
- (b) When counting persons holding paid hunting or fishing licenses in a State-specified license certification period, a State fish and wildlife agency must abide by the following requirements:
- (1) The State may count all persons who possess a paid license that allows the licensee to hunt or fish for sport or recreation. The State may not count persons holding a license that allows the licensee only to trap animals or only to engage in commercial activities.
  - (2) The State may count only those persons who possess a license that produced net revenue of at least \$1 per year returned to the State after deducting costs directly associated with issuance of the license. Examples of such costs are agents' or sellers' fees and the cost of printing, distribution, and control.
  - (3) The State may count persons possessing a single-year license (one that is legal for less than 2 years) only in the State-specified license certification period in which the license was purchased.
  - (4) The State may count persons possessing a multiyear license (one that is legal for 2 years or more) in each State-specified license certification period in which the license is legal, whether it is legal for a specific or indeterminate number of years, only if:
    - (i) The net revenue from the license is in close approximation with the number of years in which the license is legal, and
    - (ii) The State fish and wildlife agency uses statistical sampling or other techniques approved by the Director to determine whether the licensee remains a license holder.
  - (5) The State may count persons possessing a combination license (one that permits the licensee to both hunt and fish) with:
    - (i) The number of persons who hold paid hunting licenses in the State-specified license certification period, and

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(ii) The number of persons who hold paid fishing licenses in the same State-specified license certification period.

(6) The State may count persons possessing multiple hunting or fishing licenses (in States that require or permit more than one license to hunt or more than one license to fish) only once with:

(i) The number of persons who hold paid hunting licenses in the State-specified license certification period, and

(ii) The number of persons who hold paid fishing licenses in the same State-specified license certification period.

(c) The director of the State fish and wildlife agency must provide the certified information required in paragraphs (a) and (b) of this section to the Service by the date and in the format that the Director specifies. If the Director requests it, the director of the State fish and wildlife agency must provide documentation to support the accuracy of this information. The director of the State fish and wildlife agency is responsible for eliminating multiple counting of single individuals in the information that he or she certifies and may use statistical sampling or other techniques approved by the Director for this purpose.

(d) Once the Director approves the certified information required in paragraphs (a) and (b) of this section, the Service must not adjust the numbers if such adjustment would adversely impact any apportionment of funds to a State fish and wildlife agency other than the agency whose certified numbers are being adjusted. However, the Director may correct an error made by the Service.

[73 FR 43128, July 24, 2008]

**§ 80.11 Submission of proposals.**

A State may apply to use funds apportioned under the Acts by submitting to the Regional Director either a comprehensive fish and wildlife management plan or grant proposal.

(a) Each application must contain such information as the Regional Director may require to determine if the proposed activities are in accordance with the Acts and the provisions of this part.

(b) The State must submit each application and amendments of scope to the State Clearinghouse as required by Office of Management and Budget (OMB) Circular A-95 and by State Clearinghouse requirements.

(c) Applications must be signed by the director of the State fish and wildlife agency or an official delegated to exercise the authority and responsibilities of the State director in committing the State to participate under the Acts. The director of each State fish and wildlife agency must notify the Regional Director, in writing, of the official(s) authorized to sign the Wildlife and Sport Fish Restoration Program documents, and any changes in such authorizations.

[73 FR 43128, July 24, 2008]

**§ 80.12 Cost sharing.**

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Federal participation is limited to 75 percent of eligible costs incurred in the completion of approved work or the Federal share specified in the grant, whichever is less, except that the non-Federal cost sharing for the Commonwealths of Puerto Rico and the Northern Mariana Islands, the District of Columbia, and the territories of Guam, the U.S. Virgin Islands, and American Samoa must not exceed 25 percent and may be waived at the discretion of the Regional Director.

- (a) A minimum Federal participation of 10 percent of the estimated costs is required as a condition of approval.
- (b) The non-Federal share of project costs may be in the form of cash or in-kind contributions.
- (c) The non-Federal share of project costs may not be derived from other Federal funds, except as authorized by specific legislation.

[>47 FR 22539, May 25, 1982, as amended at 73 FR 43129, July 24, 2008]

**§ 80.13 Substantiality in character and design.**

All projects proposed for funding under the Acts must be substantial in character and design. A substantial project (for fish and wildlife purposes) is one which:

- (a) Identifies and describes a need within the purposes of the relevant Act to be utilized;
- (b) Identifies the objectives to be accomplished based on the stated need;
- (c) Utilizes accepted fish and wildlife conservation and management principles, sound design, and appropriate procedures; and
- (d) Will yield benefits which are pertinent to the identified need at a level commensurate with project costs.

**§ 80.14 Application of Wildlife and Sport Fish Restoration Program funds.**

(a) States must apply Wildlife and Sport Fish Restoration Program funds only to activities or purposes approved by the Regional Director. If otherwise applied, such funds must be replaced or the State becomes ineligible to participate.

(b) Real property acquired or constructed with Wildlife and Sport Fish Restoration Program funds must continue to serve the purpose for which acquired or constructed.

(1) When such property passes from management control of the State fish and wildlife agency, the control must be fully restored to the State fish and wildlife agency or the real property must be replaced using non-Federal funds not derived from license revenues. Replacement property must be of equal value at current market prices and with equal benefits as the original property. The State may have up to 3 years from the date of notification by the Regional Director to acquire replacement property before becoming ineligible.

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(2) When such property is used for purposes that interfere with the accomplishment of approved purposes, the violating activities must cease and any adverse effects resulting must be remedied.

(3) When such property is no longer needed or useful for its original purpose, and with prior approval of the Regional Director, the property must be used or disposed of as provided by 43 CFR 12.71 or 43 CFR 12.932.

(c) Wildlife and Sport Fish Restoration Program funds cannot be used for the purpose of producing income. However, income-producing activities incidental to accomplishment of approved purposes are allowable. Income derived from such activities must be accounted for in the project records and disposed of as directed by the Director.

[73 FR 43129, July 24, 2008]

**§ 80.15 Allowable costs.**

(a) *What are allowable costs?* Allowable costs are costs that are necessary and reasonable for accomplishment of approved project purposes and are in accordance with the cost principles of OMB Circular A-87 (For availability, see 5 CFR 1310.3.).

(b) *What is required to determine the allowability of costs?* Source documents or other records as necessary must support all costs to substantiate the application of funds. Such documentation and records are subject to review by the Service and, if necessary, the Secretary to determine the allowability of costs.

(c) *Are costs allowable if they are incurred prior to the date of the grant?* Costs incurred prior to the effective date of the grant are allowable only when specifically provided for in the grant.

(d) *How are costs allocated in multipurpose projects or facilities?* Projects or facilities designed to include purposes other than those eligible under either the Dingell-Johnson Sport Fish Restoration or Pittman-Robertson Wildlife Restoration Acts must provide for the allocation of costs among the various purposes. The method used to allocate costs must produce an equitable distribution of costs based on the relative uses or benefits provided.

(e) *What is the limit on administrative costs for State central services?* Administrative costs in the form of overhead or indirect costs for State central services outside of the State fish and wildlife agency must be in accord with an approved cost allocation plan and cannot exceed in any one fiscal year three per centum of the annual apportionment to that State. Each State has a State Wide Cost Allocation Plan that describes approved allocations of indirect costs to agencies and programs within the State.

(f) *How much money may be obligated for aquatic resource education and outreach and communications?*

(1) Each of the 50 States may spend no more than 15 percent of the annual amount apportioned to it under the provisions of the Dingell-Johnson Sport Fish Restoration Act for an aquatic resource education and outreach and communications program for the purpose of increasing public understanding of the Nation's water resources and associated aquatic life forms.

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(2) The Commonwealths of Puerto Rico and the Northern Mariana Islands, the District of Columbia, and the territories of Guam, the U.S. Virgin Islands, and American Samoa are not limited to the 15-percent cap imposed on the 50 States. Each of these entities may spend more for these purposes with the approval of the appropriate Regional Director.

[66 FR 18212, Apr. 6, 2001, as amended at 43129, July 24, 2008]

**§ 80.16 Payments.**

Payments must be made for the Federal share of allowable costs incurred by the State in accomplishing approved projects.

- (a) Requests for payments must be submitted on forms furnished by the Regional director.
- (b) Payments must be made only to the office or official designated by the State fish and wildlife agency and authorized under the laws of the State to receive public funds for the State.
- (c) All payments are subject to final determination of allowability based on audit. Any overpayments made to the State must be recovered as directed by the Regional Director.
- (d) The Regional director may withhold payments pending receipt of all required reports or documentation for the project.

[47 FR 22539, May 25, 1982, as amended at 73 FR 43129, July 24, 2008]

**§ 80.17 Maintenance.**

The State is responsible for maintenance of all capital improvements acquired or constructed with Wildlife and Sport Fish Restoration Program funds throughout the useful life of each improvement. Costs for such maintenance are allowable when provided for in approved projects. The maintenance of improvements acquired or constructed with funds other than funds from the Wildlife and Sport Fish Restoration Program are allowable costs when such improvements are necessary for accomplishment of project purposes as approved by the Regional Director and when such costs are otherwise allowable by law.

[73 FR 43129, July 24, 2008]

**§ 80.18 Responsibilities.**

In the conduct of activities funded under the Acts, the State is responsible for:

- (a) The supervision of each project to assure it is conducted as provided in the project documents, including:
  - (1) Proper and effective use of funds.
  - (2) Maintenance of project records.

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(3) Timely submission of reports.

(4) Regular inspection and monitoring of work in progress.

(b) The selection and supervision of project personnel to assure that:

(1) Adequate and competent personnel are available to carry the project through to a satisfactory and timely completion.

(2) Project personnel perform the work to ensure that time schedules are met, projected work units are accomplished, other performance objectives are being achieved, and reports are submitted as required.

(c) The accountability and control of all assets to assure that they serve the purpose for which acquired throughout their useful life.

(d) The compliance with all applicable Federal, State, and local laws.

(e) The settlement and satisfaction of all contractual and administrative issues arising out of procurement entered into.

**§ 80.19 [Reserved]**

**§ 80.20 Land control.**

The State must control lands or waters on which capital improvements are made with Wildlife and Sport Fish Restoration Program funds. Controls may be exercised through fee title, lease, easement, or agreement. Control must be adequate for protection, maintenance, and use of the improvement throughout its useful life.

[47 FR 22539, May 25, 1982, as amended at 73 FR 43129, July 24, 2008]

**§ 80.21 Assurances.**

The State must agree to and certify that it will comply with all applicable Federal laws, regulations, and requirements as they relate to the application, acceptance, and use of Federal funds under the Acts. The Secretary shall have the right to review or inspect for compliance at any time. Upon determination of noncompliance, the Secretary may terminate or suspend those projects in noncompliance, or may declare the State ineligible for further participation in program benefits until compliance is achieved.

**§ 80.22 [Reserved]**

**§ 80.23 Allocation of funds between marine and freshwater fishery projects.**

(a) Each coastal State, to the extent practicable, must equitably allocate those funds specified by the Secretary, in the apportionment of the Dingell-Johnson Sport Fish Restoration funds, between projects having recreational benefits for marine fisheries and projects having recreational benefits for freshwater fisheries.

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(1) Coastal States are: Alabama, Alaska, California, Connecticut, Delaware, Florida, Georgia, Hawaii, Louisiana, Maine, Maryland, Massachusetts, Mississippi, New Hampshire, New Jersey, New York, North Carolina, Oregon, Rhode Island, South Carolina, Texas, Virginia, and Washington; the territories of Guam, the U.S. Virgin Islands, and American Samoa; and the Commonwealths of Puerto Rico and the Northern Mariana Islands.

(2) The allocation and subsequent obligation of funds between projects that benefit marine and freshwater interests will be in the same proportion as the estimated number of resident marine anglers and resident freshwater anglers, respectively, bears to the estimated number of total resident anglers in the State. The number of marine and freshwater anglers shall be based on a statistically reliable method for determining the relative distribution of resident anglers in the State between those that fish in saltwater and those that fish in freshwater.

(3) To the extent practicable means that the amounts allocated of each year's apportionment may not necessarily result in an equitable allocation for each year. However, the amounts allocated over a period, not to exceed 3 years, must result in an equitable allocation between marine and freshwater fisheries projects. Ongoing marine project costs can be applied toward the State's saltwater allocation.

(4) Failure to provide for an equitable allocation may result in the State's becoming ineligible to participate in the use of those funds specified, until such time as the State demonstrates to the satisfaction of the Director that funds will be allocated equitably.

(b) [Reserved]

[50 FR 21448, May 24, 1985, as amended at 43129, July 24, 2008]

**§ 80.24 Recreational boating access facilities.**

The State must allocate 15 percent of each annual apportionment under the Dingell-Johnson Sport Fish Restoration Act for recreational boating access facilities. However, a State may allocate more or less than 15 percent of its annual allocation with the approval of the Service's Regional Director. Although a broad range of access facilities and associated amenities can qualify for funding under the 15-percent provision, the State must accommodate power boats with common horsepower ratings, and must make reasonable efforts to accommodate boats with larger horsepower ratings if they would not conflict with aquatic resources management. Any portion of a State's 15-percent set aside for the above purposes that remain unexpended or unobligated after 5 years must revert to the Service for apportionment among the States.

[43139, July 24, 2008]

**§ 80.25 Multiyear financing under the Dingell-Johnson Sport Fish Restoration Program.**

(a) States may finance the acquisition of lands or interests in lands including water rights and the construction of structures and facilities utilizing multiyear funding as authorized by the Dingell-Johnson Sport Fish Restoration Act in two ways:

(1) States may finance the entire cost of the acquisition or construction from a non-Federal funding source and claim Federal reimbursement in succeeding apportionment years according to a scheduled reimbursement plan.

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(2) States may negotiate an installment purchase or contract whereby periodic and specified amounts are paid to the seller or contractor and Federal reimbursements are allowed for each payment from any apportionment year current at the time of payment.

(b) Multiyear financing is subject to the following conditions:

(1) Projects must provide for prospective use of funds and be approved by the Regional Director in advance of the State's obligation or commitment to purchase property or contract for structures or facilities.

(2) States must agree to complete the project even if Federal funds are not available. In the event the project is not completed, those Federal funds expended but not resulting in commensurate sport fishery benefits must be recovered by the State and reallocated to approved State sport fish projects.

(3) Project proposals must include a complete schedule of payments to complete the project.

(4) No costs for interest or financing shall be claimed for reimbursement.

[50 FR 21448, May 24, 1985, as amended at 73 FR 43130, July 24, 2008]

**§ 80.26 Symbols.**

We have prescribed distinctive symbols to identify projects funded by the Pittman-Robertson Wildlife Restoration Act and the Dingell-Johnson Sport Fish Restoration Act and items on which taxes and duties have been collected to support the respective Acts.

(a) All recipients identified in §80.2 of this part are authorized to display the appropriate symbol(s) on areas, such as wildlife management areas and fishing access facilities, acquired, developed, operated or maintained by these grants, or on printed material or other visual representations relating to project accomplishments. Recipients may require sub-recipients to display the symbol(s) and may authorize use by others, or for purposes other than as stated above, only with approval of the Director, U.S. Fish and Wildlife Service.

(b) Other persons or organizations may use the symbol(s) for purposes related to the Wildlife and Sport Fish Restoration Program as authorized by the Director. Authorization for the use of the symbol(s) will be by written agreement executed by the Service and the user. To obtain authorization, submit a written request stating the specific use and items to which the symbol(s) will be applied to Director, U.S. Fish and Wildlife Service, Washington, DC 20240.

(c) The user of the symbol(s) shall indemnify and defend the United States and hold it harmless from any claims, suits, losses and damages arising out of any allegedly unauthorized use of any patent, process, idea, method or device by the user in connection with its use of the symbol(s), or any other alleged action of the user and also from any claims, suits, losses and damages arising out of alleged defects in the articles or services with which the symbol(s) is associated.

(d) The appearance of the symbol(s) on projects or items is to indicate that the manufacturer of the product is taxed by, and that the State project was funded through, the respective Act(s). The U.S. Fish and Wildlife Service and the Department of the Interior make no representation or endorsement

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whatsoever by the display of the symbol(s) as to the quality, utility, suitability or safeness of any product, service or project with which the symbol(s) is associated.

(e) Neither symbol may be used in any other manner except as authorized by the Director, U.S. Fish and Wildlife Service. Unauthorized use of the symbol(s) will constitute a violation of section 701 of title 18 of the United States Code and subject the violator to possible fines and imprisonment as set forth therein.

(f) The symbol pertaining to the Pittman-Robertson Wildlife Restoration Act is below.



(g) The symbol pertaining to the Dingell-Johnson Sport Fish Restoration Act is below.



(h) The symbol pertaining to the Pittman-Robertson Wildlife Restoration Act and the Dingell-Johnson Sport Fish Restoration Act when used in combination is below.



[52 FR 47571, Dec. 15, 1987, as amended at 73 FR 43130, July 24, 2008]

§ 80.27 Information collection requirements.

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(a) Information gathering requirements include filling out forms to apply for certain benefits offered by the Federal Government. Information gathered under this part is authorized under the Dingell-Johnson Sport Fish Restoration Act (16 U.S.C. 777–777n) and the Pittman-Robertson Wildlife Restoration Act (16 U.S.C. 669–669k). The Service may not conduct or sponsor, and applicants or grantees are not required to respond to, a collection of information unless the request displays a currently valid OMB control number. OMB has approved our collection of information under OMB control number 1018–0007. Our requests for information will be used to apportion funds and to review and make decisions on grant applications and reimbursement payment requests submitted to the Wildlife and Sport Fish Restoration Program.

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## HISTORY

The Recreational Boating Safety (RBS) Federal financial assistance program was first established by the Federal Boat Safety Act (FBSA) of 1971 to "encourage greater State participation and uniformity in boating safety efforts, and particularly to permit the States to assume the greater share of boating safety education, assistance, and enforcement activities" (46 U.S.C. 13101). The Secretary of Transportation delegated administration of the program to the U.S. Coast Guard. Funding for the grants was provided from general revenue through the Coast Guard's Operating Expenses (OE) appropriations.

### Grant Program Renewed

Authorization for the RBS grant program expired in 1979, but was reestablished by the Recreational Boating Safety and Facilities Improvement Act of 1980 (the Biaggi Act). The Biaggi Act also provided that a portion of Federal excise tax receipts attributable to motorboat fuel use would be transferred from the Highway Trust Fund to a new Recreational Boating Safety fund to provide monies for the program. In utilizing the fuel taxes being paid by boaters, the Biaggi Act ensured that those receiving the benefits of the program would also pay the costs. The first appropriations under this new mechanism were approved in 1982.

### Additional Funding Approved

The Aquatic Resources (Wallop-Breaux) Trust Fund was established in the Deficit Reduction Act of 1984 to improve funding to the States for the RBS program administered by the Coast Guard and the Sport Fish Restoration program administered by the U.S. Fish and Wildlife Service. The legislation provided that the two separate funds for those programs would become individual accounts under the single umbrella of the new Wallop-Breaux fund. Trust fund receipts consist of Federal excise taxes attributable to motorboat and small-engine fuel use and on sport fishing equipment, along with import duties on fishing equipment, yachts and pleasure craft. The Boat Safety Account is funded solely from motorboat fuel taxes. The Sport Fish Restoration Account receives a portion of the motorboat fuel tax as well as all other trust fund receipts. The State grant programs funded through Wallop-Breaux are excellent examples of "user pays/user benefits" since all monies deposited into the trust fund are paid by boaters and fishermen. No general tax revenues are involved.

The financial assistance provided to the States through Wallop-Breaux has contributed significantly to the States' ability to assume an increasingly larger share of responsibility for RBS program activities, as envisioned by FBSA of 1971, and is critical to the continued success of the State RBS programs.

### Results of Program

The Coast Guard/State cooperative effort in recreational boating safety is an outstanding example of the ability of government at all levels to work together for the benefit of the public and has directly resulted

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in safer boating for millions of Americans. This is evidenced by the fact that the number of reported recreational boating fatalities has been reduced from a high of 1,754 in 1973 to about 800 per year. During the same period, the number of boats owned by Americans more than doubled.

The Secretary shall establish guidelines prescribing the purposes for which amounts available under this chapter for State recreational boating safety programs may be used. Those purposes shall include

- (1) providing facilities, equipment, and supplies for boating safety education and law enforcement, including purchase, operation, maintenance, and repair;
- (2) training personnel in skills related to boating safety and to the enforcement of boating safety laws and regulations;
- (3) providing public boating safety education, including educational programs and lectures, to the boating community and the public school system;
- (4) acquiring, constructing, or repairing public access sites used primarily by recreational boaters;
- (5) conducting boating safety inspections and marine casualty investigations;
- (6) establishing and maintaining emergency or search and rescue facilities, and providing emergency or search and rescue assistance;
- (7) establishing and maintaining waterway markers and other appropriate aids to navigation; and
- (8) providing State recreational vessel numbering and titling programs.

(c)

(1) Of the amount transferred to the Secretary under subsection (a)(2) of section 4 of the Dingell-Johnson Sport Fish Restoration Act (16 U.S.C. 777c (a)(2)), \$5,500,000 is available to the Secretary for payment of expenses of the Coast Guard for personnel and activities directly related to coordinating and carrying out the national recreational boating safety program under this title, of which not less than \$2,000,000 shall be available to the Secretary only to ensure compliance with chapter 43 of this title.

(2) No funds available to the Secretary under this subsection may be used to replace

-CITE-

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-EXPCITE-

TITLE 46 - SHIPPING  
Subtitle II - Vessels and Seamen  
Part I - State Boating Safety Programs  
CHAPTER 131 - RECREATIONAL BOATING SAFETY

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CHAPTER 131 - RECREATIONAL BOATING SAFETY

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Sec.  
13101. Definitions.  
13102. State recreational boating safety programs.  
13103. Program acceptance.  
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13105. Availability of allocations.  
13106. Computation decisions about State amounts expended.  
13107. Authorization of appropriations.  
13108. Computing amounts allocated to States and State records requirements.  
13109. Consultation, cooperation, and regulation.

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13110. National Boating Safety Advisory Council.

**HISTORICAL AND REVISION NOTES**

This Chapter establishes the recreational boating safety and facility program administered by the Coast Guard. The general purpose is to encourage State participation in boating safety education and enforcement activities.

**AMENDMENTS**

2006 - Pub. L. 109-304, Sec. 16(b)(3), Oct. 6, 2006, 120 Stat. 1705, added item 13101 and redesignated former items 13101 to 13106 as 13102 to 13107, respectively.

1998 - Pub. L. 105-178, title VII, Sec. 7405(c)(2), June 9, 1998, 112 Stat. 488, substituted "appropriations" for "contract spending" in item 13106.

1984 - Pub. L. 98-369, div. A, title X, Sec. 1016(c)(2), July 18, 1984, 98 Stat. 1020, struck out item 13107 "National Recreational Boating Safety and Facilities Improvement Fund".

-End-

-CITE-

46 USC Sec. 13101 02/01/2010

-EXPCITE-

TITLE 46 - SHIPPING  
Subtitle II - Vessels and Seamen  
Part I - State Boating Safety Programs  
CHAPTER 131 - RECREATIONAL BOATING SAFETY

-HEAD-

Sec. 13101. Definitions

-STATUTE-

In this chapter:

(1) Eligible State. - The term "eligible State" means a State that has a State recreational boating safety program accepted by the Secretary.

(2) State Recreational Boating Safety Program. - The term "State recreational boating safety program" means education, assistance, and enforcement activities conducted for maritime casualty prevention, reduction, and reporting for recreational boating.

-SOURCE-(Pub. L. 109-304, Sec. 16(b)(2), Oct. 6, 2006, 120 Stat. 1705.)

-MISC1-

**HISTORICAL AND REVISION NOTES**

Section 16 of the bill [H.R. 1442, which became Pub. L. 109-304] moves the definitions relating to the recreational boating safety program from section 2102(a)(1) and (3) to chapter 131 because the terms only appear in chapter 131.

Section 16 of the bill also eliminates the special definitions of "State" and "United States" in section 2102(a)(2) as including the Trust Territory of the Pacific Islands because the Trust Territory

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has been terminated. See the definitions of "State" and "United States" in section 2101, which are being moved to chapter 1 and being made applicable title-wide. Those definitions already include the Northern Mariana Islands, the only component of the former Trust Territory still under United States sovereignty.

**PRIOR PROVISIONS**

A prior section 13101 was renumbered section 13102 of this title.

-End-

-CITE-

46 USC Sec. 13102

02/01/2010

-EXPCITE-

TITLE 46 - SHIPPING

Subtitle II - Vessels and Seamen

Part I - State Boating Safety Programs

CHAPTER 131 - RECREATIONAL BOATING SAFETY

-HEAD-

Sec. 13102. State recreational boating safety programs

-STATUTE-

(a) To encourage greater State participation and uniformity in boating safety efforts, and particularly to permit the States to assume the greater share of boating safety education, assistance, and enforcement activities, the Secretary shall carry out a national recreational boating safety program. Under this program, the Secretary shall make contracts with, and allocate and distribute amounts to, eligible States to assist them in developing, carrying out, and financing State recreational boating safety programs.

(b) The Secretary shall establish guidelines and standards for the program. In doing so, the Secretary -

(1) shall consider, among other things, factors affecting recreational boating safety by contributing to overcrowding and congestion of waterways, such as the increasing number of recreational vessels operating on those waterways and their geographic distribution, the availability and geographic distribution of recreational boating facilities in and among applying States, and State marine casualty and fatality statistics for recreational vessels;

(2) shall consult with the Secretary of the Interior to minimize duplication with the purposes and expenditures of the Land and Water Conservation Fund Act of 1965 (16 U.S.C. 4601-4 - 4601-11) the Federal Aid in Sport Fish Restoration Act of 1950 (16 U.S.C. 777-777k), and with the guidelines developed under

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those Acts; and

(3) shall maintain environmental standards consistent with the Coastal Zone Management Act of 1972 (16 U.S.C. 1451-1464) and other laws and policies of the United States intended to safeguard the ecological and esthetic quality of the waters and wetlands of the United States.

(c) A State whose recreational boating safety program has been approved by the Secretary is eligible for allocation and distribution of amounts under this chapter to assist that State in developing, carrying out, and financing its program. Matching amounts shall be allocated and distributed among eligible States by the Secretary as provided by section 13104 of this title.

**-SOURCE-**

(Pub. L. 98-89, Aug. 26, 1983, 97 Stat. 592, Sec. 13101; Pub. L. 98-369, div. A, title X, Sec. 1011(b), July 18, 1984, 98 Stat. 1013; Pub. L. 101-595, title III, Sec. 312(a), Nov. 16, 1990, 104 Stat. 2987; renumbered Sec. 13102 and amended Pub. L. 109-304, Sec. 16(b)(1), (c)(3), Oct. 6, 2006, 120 Stat. 1705, 1706.)

**-MISC1-**

**HISTORICAL AND REVISION NOTES**

Revised section	Source section (U.S. Code)
13101	46:1474

Section 13101(a) authorizes the Secretary to make contracts with, and allocate amounts to eligible States to assist them in carrying out their recreational boating safety and facilities improvement programs.

Subsection (b) requires the Secretary to establish guidelines and standards for the program, and specifies specific conditions the Secretary must consider, requires consultation with the Secretary of the Interior, and to maintain environmental standards consistent with the Coastal Zone Management Act.

Subsection (c) makes the States who meet the standards prescribed by the Secretary eligible for the amounts authorized under this chapter.

**-REFTEXT-**

**REFERENCES IN TEXT**

The Land and Water Conservation Fund Act of 1965, referred to in subsec. (b)(2), is Pub. L. 88-578, Sept. 3, 1964, 78 Stat. 897, as

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amended, which is classified generally to part B (Sec. 4601-4 et seq.) of subchapter LXIX of chapter 1 of Title 16, Conservation. For complete classification of this Act to the Code, see Short Title note set out under section 4601-4 of Title 16 and Tables.

The Federal Aid in Sport Fish Restoration Act of 1950, referred to in subsec. (b)(2), is act Aug. 9, 1950, ch. 658, 64 Stat. 430, as amended, also known as the Dingell-Johnson Sport Fish Restoration Act, the Federal Aid in Fish Restoration Act, and the Fish Restoration and Management Projects Act, which is classified generally to chapter 10B (Sec. 777 et seq.) of Title 16. For complete classification of this Act to the Code, see Short Title note set out under section 777 of Title 16 and Tables.

The Coastal Zone Management Act of 1972, referred to in subsec. (b)(3), is title III of Pub. L. 89-454 as added by Pub. L. 92-583, Oct. 27, 1972, 86 Stat. 1280, as amended, which is classified generally to chapter 33 (Sec. 1451 et seq.) of Title 16. For complete classification of this Act to the Code, see Short Title note set out under section 1451 of Title 16 and Tables.

-MISC2-

**PRIOR PROVISIONS**

A prior section 13102 was renumbered section 13103 of this title.

**AMENDMENTS**

2006 - Pub. L. 109-304, Sec. 16(b)(1), renumbered section 13101 of this title as this section.

Subsec. (c). Pub. L. 109-304, Sec. 16(c)(3), substituted "section 13104" for "section 13103".

1990 - Subsec. (b)(2). Pub. L. 101-595 substituted "the Federal Aid in Sport Fish Restoration Act of 1950 (16 U.S.C. 777-777k), and with the guidelines developed under those Acts; and" for "and with the guidelines developed under that Act; and".

1984 - Subsec. (a). Pub. L. 98-369, Sec. 1011(b), struck out "and facility improvement" after "in boating safety", struck out "and facilities improvement" in two places after "recreational boating safety", and substituted "shall" for "may" in second sentence.

Subsec. (c). Pub. L. 98-369, Sec. 1011(b)(1)(B), struck out "and facilities improvement" after "recreational boating safety".

**EFFECTIVE DATE OF 1984 AMENDMENT**

Pub. L. 98-369, div. A, title X, subtitle B, part I, subpart A (Secs. 1010-1013), Sec. 1013, July 18, 1984, 98 Stat. 1014, provided that: "The amendments made by this subpart [amending this section and sections 2102, 13102, 13103, 13105, 13106, 13108, and 13109 of this title and enacting a provision set out as a note under this section] shall take effect on October 1, 1984, and shall apply with respect to fiscal years beginning after September 30, 1984."

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**SURVEY OF FUEL USE BY RECREATIONAL VESSELS**

Pub. L. 100-448, Sec. 6(d), Sept. 28, 1988, 102 Stat. 1841, provided that:

"(1) In general. - The Secretary of Transportation and the Secretary of the Interior shall jointly conduct a survey of -

"(A) the number, size, and primary uses of recreational vessels operating on the waters of the United States; and

"(B) the amount and types of fuel used by those vessels.

"(2) Authorization of contracts. - The Secretary of Transportation and the Secretary of the Interior may enter into contracts for the performance of a survey pursuant to this subsection.

"(3) Report. - The Secretary of the Interior and the Secretary of Transportation shall jointly submit a report to the Speaker of the House of Representatives and to the President pro tempore of the Senate which describes the results of the survey conducted pursuant to this section not later than November 15, 1992.

"(4) Funding. - Activities under this subsection may be carried out -

"(A) using amounts available to the Secretary of the Interior for administrative expenses under the Act entitled 'An Act to provide that the United States shall aid the States in fish restoration and management projects, and for other purposes' (64 Stat. 430; 16 U.S.C. 777 et seq.); and

"(B) subject to appropriations, using amounts available to the Secretary of Transportation under section 13106(a)(1) [now section 13107(a)(1)] of title 46, United States Code (as amended by this Act)."

**CONGRESSIONAL DECLARATION OF POLICY FOR 1984 AMENDMENT**

Pub. L. 98-369, div. A, title X, subtitle B, part I (Secs. 1010-1017), Sec. 1010, July 18, 1984, 98 Stat. 1012, provided that: "It is declared to be the policy of Congress and the purpose of this part [enacting sections 4162 and 9504 of Title 26, Internal Revenue Code, amending this section, sections 2102, 13102, 13103, 13105, 13106, 13108, and 13109 of this title, sections 777, 777b to 777e, 777g, and 777k of Title 16, Conservation, and sections 4161 and 9503 of Title 26, repealing section 13107 of this title, and enacting provisions set out as notes under this section, section 777 of Title 16, and sections 4161, 4162, and 9504 of Title 26] to improve recreational boating safety and to foster greater development, use, and enjoyment of all waters of the United States by encouraging and assisting participation by the States, the boating industry, and the boating public in activities related to increasing boating safety; by authorizing the establishment of national construction and performance standards for boats and associated equipment; by creating more flexible authority governing the use of boats and equipment; and by facilitating the provision

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of services by the United States Coast Guard on behalf of boating safety. It is further declared to be the policy of Congress to encourage greater and continuing uniformity of boating laws and regulations among the States and the Federal Government, to encourage and assist the States in exercising their authorities in boating safety, to foster greater cooperation and assistance between the Federal Government and the States in administering and enforcing Federal and State laws and regulations pertaining to boating safety, and to equitably utilize taxes paid on fuel use in motor boats in a manner which enhances boating safety."

[For transfer of authorities, functions, personnel, and assets of the Coast Guard, including the authorities and functions of the Secretary of Transportation relating thereto, to the Department of Homeland Security, and for treatment of related references, see sections 468(b), 551(d), 552(d), and 557 of Title 6, Domestic Security, and the Department of Homeland Security Reorganization Plan of November 25, 2002, as modified, set out as a note under section 542 of Title 6.]

-End-

-CITE-

46 USC Sec. 13103

02/01/2010

-EXPCITE-

TITLE 46 - SHIPPING

Subtitle II - Vessels and Seamen

Part I - State Boating Safety Programs

CHAPTER 131 - RECREATIONAL BOATING SAFETY

-HEAD-

Sec. 13103. Program acceptance

-STATUTE-

(a) The Secretary shall make a contract with, and allocate and distribute amounts from the Sport Fish Restoration and Boating Trust Fund established by section 9504 of the Internal Revenue Code of 1986 (26 U.S.C. 9504) to, a State that has an approved State recreational boating safety program, if the State demonstrates to the Secretary's satisfaction that -

- (1) the program submitted by that State is consistent with this chapter and chapters 61 and 123 of this title;
- (2) amounts distributed will be used to develop and carry out a State recreational boating safety program containing the minimum requirements of subsection (c) of this section;
- (3) sufficient State matching amounts are available from general State revenue, undocumented vessel numbering and license

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fees, State marine fuels taxes, or from a fund constituted from the proceeds of those taxes and established to finance a State recreational boating safety program; and

(4) the program submitted by that State designates a State lead authority or agency that will carry out or coordinate carrying out the State recreational boating safety program supported by financial assistance of the United States Government in that State, including the requirement that the designated State authority or agency submit required reports that are necessary and reasonable to carry out properly and efficiently the program and that are in the form prescribed by the Secretary.

(b) Amounts of the Government (except amounts from sources referred to in subsection (a)(3) of this section) may not be used to provide a State's share of the costs of the program described under this section. State matching amounts committed to a program under this chapter may not be used to constitute the State's share of matching amounts required by another program of the Government.

(c) The Secretary shall approve a State recreational boating safety program, and the program is eligible to receive amounts authorized to be expended under section 13107 of this title, if the program includes -

- (1) a vessel numbering system approved or carried out by the Secretary under chapter 123 of this title;
- (2) a cooperative boating safety assistance program with the Coast Guard in that State;
- (3) sufficient patrol and other activity to ensure adequate enforcement of applicable State boating safety laws and regulations;
- (4) an adequate State boating safety education program, that includes the dissemination of information concerning the hazards of operating a vessel when under the influence of alcohol or drugs; and
- (5) a system, approved by the Secretary, for reporting marine casualties required under section 6102 of this title.

(d) The Secretary's approval under this section is a contractual obligation of the Government for the payment of a proportionate share of the cost of carrying out the program.

**-SOURCE-**

(Pub. L. 98-89, Aug. 26, 1983, 97 Stat. 593, Sec. 13102; Pub. L. 98-369, div. A, title X, Sec. 1011(c), July 18, 1984, 98 Stat. 1013; Pub. L. 98-557, Sec. 7(b)(3), Oct. 30, 1984, 98 Stat. 2862; Pub. L. 99-307, Sec. 1(17), May 19, 1986, 100 Stat. 446; Pub. L. 99-626, Sec. 4(a), (b), Nov. 7, 1986, 100 Stat. 3505; Pub. L. 100-448, Sec. 6(b)(3)-(5), Sept. 28, 1988, 102 Stat. 1840; Pub. L. 101-595, title III, Sec. 312(b), Nov. 16, 1990, 104 Stat. 2987; Pub. L. 109-59, title X, Sec. 10141, Aug. 10, 2005, 119 Stat. 1931; renumbered Sec.

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13103 and amended Pub. L. 109-304, Secs. 15(25), 16(b)(1), (c)(4),  
Oct. 6, 2006, 120 Stat. 1704-1706.)

-MISC1-

**HISTORICAL AND REVISION NOTES**

Revised section	Source section (U.S. Code)
13102	46:1475

Section 13102(a) authorizes the Secretary to contract with the States and allocate the amounts of them if they demonstrate to the satisfaction of the Secretary that they have a program consistent with this chapter and chapters 61 and 123, that the amounts received will be used to develop and carry out their recreational boating safety and facilities improvement programs, that they have sufficient matching amounts available from specified revenue sources to meet the objectives of the program, that they will submit required reports to the Secretary to ensure continued compliance with the objectives of this chapter.

Subsection (b) prohibits a State from using any other funds received from the Federal Government to meet their required State match.

Subsections (c) and (d) require the Secretary to approve a State's recreational boating safety and facilities improvement program if the program meets the specified requirements of this subsection.

Subsection (e) makes the approval of a State's program a contractual obligation of the Government to pay the Federal portion of the cost to carry out the program.

Subsection (f) allows a State to submit a combined boating safety and facility improvement program if it meets the requirements of all of the objectives of both programs.

**PRIOR PROVISIONS**

A prior section 13103 was renumbered section 13104 of this title.

**AMENDMENTS**

2006 - Pub. L. 109-304, Sec. 16(b)(1), renumbered section 13102 of this title as this section.

Subsec. (a). Pub. L. 109-304, Sec. 15(25), inserted "(26 U.S.C. 9504)" after "Internal Revenue Code of 1986".

Subsec. (c). Pub. L. 109-304, Sec. 16(c)(4), substituted "section 13107" for "section 13106".

2005 - Subsec. (a). Pub. L. 109-59 substituted "the Sport Fish

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Restoration and Boating Trust Fund" for "the Boat Safety Account" in introductory provisions.

1990 - Subsec. (a)(3). Pub. L. 101-595, Sec. 312(b)(1), inserted "State" after "general".

Subsec. (c)(4). Pub. L. 101-595, Sec. 312(b)(2), inserted "or drugs" after "alcohol".

Subsec. (d). Pub. L. 101-595, Sec. 312(b)(3), substituted "a proportionate share" for "the proportional share".

1988 - Subsec. (a). Pub. L. 100-448, Sec. 6(b)(4), substituted "1986" for "1954." in introductory provisions.

Subsec. (a)(4). Pub. L. 100-448, Sec. 6(b)(5), amended par. (4) generally. Prior to amendment, par. (4) read as follows: "the program submitted by that State designates a State lead authority or agency that will carry out or coordinate carrying out the State recreational boating safety program supported by financial assistance of the United States Government in that State, including the requirement that the designated State authority or agency submit required reports that are necessary and reasonable to carry out properly and efficiently the program and that are in the form prescribed by the Secretary."

Subsec. (b). Pub. L. 100-448, Sec. 6(b)(3), substituted "(except amounts from" for "from sources (except".

1986 - Subsec. (a). Pub. L. 99-626, Sec. 4(a), substituted "Boat Safety Account established by section 9504 of the Internal Revenue Code of 1954." for "Fund established under section 13107 of this title" in introductory provisions.

Subsec. (a)(4). Pub. L. 99-626, Sec. 4(b), inserted "out" after "carrying".

Pub. L. 99-307 substituted "carrying out the State" for "carrying the State".

1984 - Subsec. (a). Pub. L. 98-369, Sec. 1011(c)(1), (2), in provisions preceding par. (1) substituted "shall" for "may" and struck out "and facilities improvement" after "boating safety".

Subsec. (a)(2). Pub. L. 98-369, Sec. 1011(c)(1), (3), struck out ", (d), or (f)" after "requirements of subsection (c)" and struck out "and facilities improvement" after "boating safety".

Subsec. (a)(3), (4). Pub. L. 98-369, Sec. 1011(c)(1), struck out "and facilities improvement" after "boating safety".

Subsec. (c)(4). Pub. L. 98-557 inserted provisions relating to dissemination of information concerning the hazards of operating a vessel when under the influence of alcohol.

Subsecs. (d), (e). Pub. L. 98-369, Sec. 1011(c)(4), redesignated subsec. (e) as (d). Former subsec. (d), which related to approval of a State recreational boating facilities improvement program by the Secretary, was struck out.

Subsec. (f). Pub. L. 98-369, Sec. 1011(c)(4), struck out subsec. (f) which related to submission by a State to the Secretary of a combined program for the improvement of recreational boating safety and recreational boating facilities.

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**EFFECTIVE DATE OF 2005 AMENDMENTS**

From Aug. 10, 2005, to end of fiscal year 2005, subsec. (a) of this section considered to read as immediately before enactment of Pub. L. 109-59, see section 101(b) of Pub. L. 109-74, set out as a note under section 777b of Title 16, Conservation.

Amendment by Pub. L. 109-59 effective Oct. 1, 2005, see section 10102 of Pub. L. 109-59, set out as a note under section 777b of Title 16, Conservation.

**EFFECTIVE DATE OF 1988 AMENDMENT**

Amendment by Pub. L. 100-448 effective Oct. 1, 1988, see section 6(e) of Pub. L. 100-448, set out as a note under section 777 of Title 16, Conservation.

**EFFECTIVE DATE OF 1984 AMENDMENT**

Amendment by Pub. L. 98-369 effective Oct. 1, 1984, to apply with respect to fiscal years beginning after Sept. 30, 1984, see section 1013 of Pub. L. 98-369, set out as a note under section 13101 of this title.

-TRANS-

**TRANSFER OF FUNCTIONS**

For transfer of authorities, functions, personnel, and assets of the Coast Guard, including the authorities and functions of the Secretary of Transportation relating thereto, to the Department of Homeland Security, and for treatment of related references, see sections 468(b), 551(d), 552(d), and 557 of Title 6, Domestic Security, and the Department of Homeland Security Reorganization Plan of November 25, 2002, as modified, set out as a note under section 542 of Title 6.

-End-

-CITE-

46 USC Sec. 13104

02/01/2010

-EXPCITE-

TITLE 46 - SHIPPING

Subtitle II - Vessels and Seamen

Part I - State Boating Safety Programs

CHAPTER 131 - RECREATIONAL BOATING SAFETY

-HEAD-

Sec. 13104. Allocations

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**-STATUTE-**

(a) The Secretary shall allocate amounts available for allocation and distribution under this chapter for State recreational boating safety programs as follows:

(1) One-third shall be allocated equally each fiscal year among eligible States.

(2) One-third shall be allocated among eligible States that maintain a State vessel numbering system approved under chapter 123 of this title and a marine casualty reporting system approved under this chapter so that the amount allocated each fiscal year to each eligible State will be in the same ratio as the number of vessels numbered in that State bears to the number of vessels numbered in all eligible States.

(3) One-third shall be allocated so that the amount allocated each fiscal year to each eligible State will be in the same ratio as the amount of State amounts expended by the State for the State recreational boating safety program during the prior fiscal year bears to the total State amounts expended during that fiscal year by all eligible States for State recreational boating safety programs.

(b) The amount received by a State under this section in a fiscal year may be not more than one-half of the total cost incurred by that State in developing, carrying out, and financing that State's recreational boating safety program in that fiscal year.

(c) The Secretary may allocate not more than 5 percent of the amounts available for allocation and distribution in a fiscal year for national boating safety activities of national nonprofit public service organizations.

**-SOURCE-**

(Pub. L. 98-89, Aug. 26, 1983, 97 Stat. 594, Sec. 13103; Pub. L. 98-369, div. A, title X, Sec. 1011(d), July 18, 1984, 98 Stat. 1013; Pub. L. 101-595, title III, Sec. 312(c), Nov. 16, 1990, 104 Stat. 2987; renumbered Sec. 13104, Pub. L. 109-304, Sec. 16(b)(1), Oct. 6, 2006, 120 Stat. 1705.)

**-MISC1-**

**HISTORICAL AND REVISION NOTES**

Revised section	Source section (U.S. Code)
13103	46:1476

Section 13103 requires the Secretary to allocate the amounts

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available for recreational boating safety and facilities improvement programs according to a specific formula:

- (1) 1/3 shall be allocated equally to each eligible State;
- (2) 1/3 shall be allocated to those States maintaining an approved numbering system; and
- (3) 1/3 shall be allocated to the State in the proportion that the State obligated in the prior fiscal year to the total amount obligated by all of the States in the prior fiscal year.

**PRIOR PROVISIONS**

A prior section 13104 was renumbered section 13105 of this title.

**AMENDMENTS**

2006 - Pub. L. 109-304 renumbered section 13103 of this title as this section.

1990 - Subsec. (a)(3). Pub. L. 101-595 struck out "or obligated" after "expended" in two places.

1984 - Subsec. (b). Pub. L. 98-369, Sec. 1011(d), redesignated subsec. (c) as (b), struck out "and facilities improvement" after "boating safety", and struck out former subsec. (b) which related to allocation of amounts for State recreational boating facilities improvement programs by the Secretary.

Subsec. (c). Pub. L. 98-369, Sec. 1011(d)(1), redesignated subsec. (e) as (c). Former subsec. (c) redesignated (b).

Subsec. (d). Pub. L. 98-369, Sec. 1011(d)(1), struck out subsec. (d) which provided that an allocation or distribution of amounts under this section may not be made to a State to maintain boating facilities under that State's approved recreational boating safety and facilities improvement program.

Subsec. (e). Pub. L. 98-369, Sec. 1011(d)(1), redesignated subsec. (e) as (c).

Subsec. (f). Pub. L. 98-369, Sec. 1011(d)(1), struck out subsec. (f) which provided that the Secretary could extend amounts necessary to carry out this chapter but that there was a limitation on the total amount allocable.

**EFFECTIVE DATE OF 1984 AMENDMENT**

Amendment by Pub. L. 98-369 effective Oct. 1, 1984, to apply with respect to fiscal years beginning after Sept. 30, 1984, see section 1013 of Pub. L. 98-369, set out as a note under section 13101 of this title.

**PAYMENT OF ADMINISTRATIVE COSTS; RETENTION OF AMOUNT PRIOR TO ALLOCATIONS**

Pub. L. 99-640, Sec. 7(d), Nov. 10, 1986, 100 Stat. 3548, which related to retention of amounts appropriated for State recreational boating safety programs prior to making allocations for a fiscal year, was repealed by Pub. L. 100-448, Sec. 6(b)(1)(B), Sept. 28, 1988, 102 Stat. 1840.

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-End-

-CITE-

46 USC Sec. 13105

02/01/2010

-EXPCITE-

TITLE 46 - SHIPPING

Subtitle II - Vessels and Seamen

Part I - State Boating Safety Programs

CHAPTER 131 - RECREATIONAL BOATING SAFETY

-HEAD-

Sec. 13105. Availability of allocations

-STATUTE-

(a)(1) Amounts allocated to a State shall be available for obligation by that State for a period of 3 years after the date of allocation.

(2) Amounts allocated to a State that are not obligated at the end of the 3-year period referred to in paragraph (1) shall be withdrawn and allocated by the Secretary in addition to any other amounts available for allocation in the fiscal year in which they are withdrawn or the following fiscal year.

(b) Amounts available to the Secretary for State recreational boating safety programs for a fiscal year that have not been allocated at the end of the fiscal year shall be allocated among States in the next fiscal year in addition to amounts otherwise available for allocation to States for that next fiscal year.

-SOURCE-

(Pub. L. 98-89, Aug. 26, 1983, 97 Stat. 595, Sec. 13104; Pub. L. 99-307, Sec. 1(18), May 19, 1986, 100 Stat. 446; Pub. L. 102-587, title V, Sec. 5101, Nov. 4, 1992, 106 Stat. 5070; Pub. L. 105-178, title VII, Sec. 7405(a), June 9, 1998, 112 Stat. 487; Pub. L. 109-59, title X, Sec. 10142, Aug. 10, 2005, 119 Stat. 1931; renumbered Sec. 13105, Pub. L. 109-304, Sec. 16(b)(1), Oct. 6, 2006, 120 Stat. 1705.)

-MISC1-

HISTORICAL AND REVISION NOTES

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Revised section

Source section (U.S. Code)  
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**IA FISH AND GAME PROTECTION FUND REPORT**  
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13104

46:1477

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Section 13104 allows a State to use any of the amounts received from the Secretary over a 3 year period. If the State does not spend the money within that period, the amounts revert to the Secretary, who will make the amounts available along with the amounts available for that year.

**PRIOR PROVISIONS**

A prior section 13105 was renumbered section 13106 of this title.

**AMENDMENTS**

2006 - Pub. L. 109-304 renumbered section 13104 of this title as this section.

2005 - Subsec. (a)(1). Pub. L. 109-59, Sec. 10142(1), substituted "3 years" for "2 years".

Subsec. (a)(2). Pub. L. 109-59, Sec. 10142(2), substituted "3-year" for "2-year".

1998 - Subsec. (a)(1). Pub. L. 105-178, Sec. 7405(a)(1), substituted "2 years" for "3 years".

Subsec. (a)(2). Pub. L. 105-178, Sec. 7405(a)(2), substituted "2-year" for "3-year".

1992 - Pub. L. 102-587 amended section generally. Prior to amendment, section read as follows:

"(a) Amounts allocated to a State shall be available for obligation by that State for a period of 3 years after the date of allocation. Amounts unobligated by the State at the end of the 3 years shall be withdrawn by the Secretary and shall be available with other amounts to be allocated by the Secretary during that fiscal year.

"(b) Amounts available to the Secretary for State recreational boating safety programs that have not been allocated at the end of a fiscal year shall be carried forward as part of the total allocation of amounts for the next fiscal year that may be expended under this chapter."

1986 - Subsec. (b). Pub. L. 99-307 inserted "for State recreational boating safety programs" after "Secretary".

**EFFECTIVE DATE OF 2005 AMENDMENTS**

From Aug. 10, 2005, to end of fiscal year 2005, subsec. (a) of this section considered to read as immediately before enactment of Pub. L. 109-59, see section 101(b) of Pub. L. 109-74, set out as a note under section 777b of Title 16, Conservation.

Amendment by Pub. L. 109-59 effective Oct. 1, 2005, see section 10102 of Pub. L. 109-59, set out as a note under section 777b of Title 16, Conservation.

-End-

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**-CITE-**

46 USC Sec. 13106

02/01/2010

**-EXPCITE-**

TITLE 46 - SHIPPING

Subtitle II - Vessels and Seamen

Part I - State Boating Safety Programs

CHAPTER 131 - RECREATIONAL BOATING SAFETY

**-HEAD-**

Sec. 13106. Computation decisions about State amounts expended

**-STATUTE-**

(a) Consistent with regulations prescribed by the Secretary, the computation by a State of amounts expended for the State recreational boating safety program shall include -

- (1) the acquisition, maintenance, and operating costs of land, facilities, equipment, and supplies;
- (2) personnel salaries and reimbursable expenses;
- (3) the costs of training personnel;
- (4) public boat safety education;
- (5) the costs of carrying out the program; and
- (6) other expenses that the Secretary considers appropriate.

(b) The Secretary shall decide an issue arising out of the computation made under subsection (a) of this section.

**-SOURCE-**

(Pub. L. 98-89, Aug. 26, 1983, 97 Stat. 596, Sec. 13105; Pub. L. 98-369, div. A, title X, Sec. 1011(e), July 18, 1984, 98 Stat. 1013; Pub. L. 101-595, title III, Sec. 312(c), Nov. 16, 1990, 104 Stat. 2987; renumbered Sec. 13106, Pub. L. 109-304, Sec. 16(b)(1), Oct. 6, 2006, 120 Stat. 1705.)

**-MISC1-**

**HISTORICAL AND REVISION NOTES**

Revised section	Source section (U.S. Code)
13105	46:1478

Section 13105 prescribes what amounts expended or obligated by a

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State will be counted toward the State's share. This section also authorizes the Secretary to settle any dispute over the computations required by this section.

**PRIOR PROVISIONS**

A prior section 13106 was renumbered section 13107 of this title.

**AMENDMENTS**

2006 - Pub. L. 109-304 renumbered section 13105 of this title as this section.

1990 - Subsec. (a). Pub. L. 101-595 struck out "or obligated" after "expended" in provisions preceding par. (1).

1984 - Subsec. (a). Pub. L. 98-369 struck out "and facilities improvement" after "boating safety" in provisions preceding par. (1).

**EFFECTIVE DATE OF 1984 AMENDMENT**

Amendment by Pub. L. 98-369 effective Oct. 1, 1984, to apply with respect to fiscal years beginning after Sept. 30, 1984, see section 1013 of Pub. L. 98-369, set out as a note under section 13101 of this title.

-End-

-CITE-

46 USC Sec. 13107

02/01/2010

-EXPCITE-

TITLE 46 - SHIPPING

Subtitle II - Vessels and Seamen

Part I - State Boating Safety Programs

CHAPTER 131 - RECREATIONAL BOATING SAFETY

-HEAD-

Sec. 13107. Authorization of appropriations

-STATUTE-

(a)(1) Subject to paragraph (2) and subsection (c), the Secretary shall expend in each fiscal year for State recreational boating safety programs, under contracts with States under this chapter, an amount equal to the sum of (A) the amount made available from the Boat Safety Account for that fiscal year under section 15 of the Dingell-Johnson Sport Fish Restoration Act and (B) the amount transferred to the Secretary under subsections (a)(2) and (f) of section 4 of the Dingell-Johnson Sport Fish Restoration Act (16 U.S.C. 777c(a)(2) and (f)). The amount shall be allocated as provided under section 13104 of this title and shall be available

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for State recreational boating safety programs as provided under the guidelines established under subsection (b) of this section. Amounts authorized to be expended for State recreational boating safety programs shall remain available until expended and are deemed to have been expended only if an amount equal to the total amounts authorized to be expended under this section for the fiscal year in question and all prior fiscal years have been obligated. Amounts previously obligated but released by payment of a final voucher or modification of a program acceptance shall be credited to the balance of unobligated amounts and are immediately available for expenditure.

(2) The Secretary shall use not more than two percent of the amount available each fiscal year for State recreational boating safety programs under this chapter to pay the costs of investigations, personnel, and activities related to administering those programs.

(b) The Secretary shall establish guidelines prescribing the purposes for which amounts available under this chapter for State recreational boating safety programs may be used. Those purposes shall include -

- (1) providing facilities, equipment, and supplies for boating safety education and law enforcement, including purchase, operation, maintenance, and repair;
- (2) training personnel in skills related to boating safety and to the enforcement of boating safety laws and regulations;
- (3) providing public boating safety education, including educational programs and lectures, to the boating community and the public school system;
- (4) acquiring, constructing, or repairing public access sites used primarily by recreational boaters;
- (5) conducting boating safety inspections and marine casualty investigations;
- (6) establishing and maintaining emergency or search and rescue facilities, and providing emergency or search and rescue assistance;
- (7) establishing and maintaining waterway markers and other appropriate aids to navigation; and
- (8) providing State recreational vessel numbering and titling programs.

(c)(1) Of the amount transferred to the Secretary under subsection (a)(2) of section 4 of the Dingell-Johnson Sport Fish Restoration Act (16 U.S.C. 777c(a)(2)), \$5,500,000 is available to the Secretary for payment of expenses of the Coast Guard for personnel and activities directly related to coordinating and carrying out the national recreational boating safety program under this title, of which not less than \$2,000,000 shall be available to the Secretary only to ensure compliance with chapter 43 of this title.

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(2) No funds available to the Secretary under this subsection may be used to replace funding traditionally provided through general appropriations, nor for any purposes except those purposes authorized by this section.

(3) Amounts made available by this subsection shall remain available during the 2 succeeding fiscal years. Any amount that is unexpended or unobligated at the end of the 3-year period during which it is available shall be withdrawn by the Secretary and allocated to the States in addition to any other amounts available for allocation in the fiscal year in which they are withdrawn or the following fiscal year.

(4) The Secretary shall publish annually in the Federal Register a detailed accounting of the projects, programs, and activities funded under this subsection.

**-SOURCE-**

(Pub. L. 98-89, Aug. 26, 1983, 97 Stat. 596, Sec. 13106; Pub. L. 98-369, div. A, title X, Sec. 1012, July 18, 1984, 98 Stat. 1013; Pub. L. 99-626, Sec. 4(c), Nov. 7, 1986, 100 Stat. 3505; Pub. L. 99-640, Sec. 7(b), (c), Nov. 10, 1986, 100 Stat. 3548; Pub. L. 100-448, Sec. 6(b)(1)(A), (2), (6), Sept. 28, 1988, 102 Stat. 1839, 1840; Pub. L. 105-178, title VII, Sec. 7405(b), (c)(1), June 9, 1998, 112 Stat. 487, 488; Pub. L. 108-88, Sec. 9(c), Sept. 30, 2003, 117 Stat. 1126; Pub. L. 108-202, Sec. 7(c), Feb. 29, 2004, 118 Stat. 484; Pub. L. 108-224, Sec. 6(c), Apr. 30, 2004, 118 Stat. 632; Pub. L. 108-263, Sec. 6(c), June 30, 2004, 118 Stat. 704; Pub. L. 108-280, Sec. 6(c), July 30, 2004, 118 Stat. 882; Pub. L. 108-310, Sec. 9(c), Sept. 30, 2004, 118 Stat. 1159; Pub. L. 109-14, Sec. 8(c), May 31, 2005, 119 Stat. 335; Pub. L. 109-20, Sec. 8(c), July 1, 2005, 119 Stat. 357; Pub. L. 109-35, Sec. 8(c), July 20, 2005, 119 Stat. 390; Pub. L. 109-37, Sec. 8(c), July 22, 2005, 119 Stat. 405; Pub. L. 109-40, Sec. 8(c), July 28, 2005, 119 Stat. 421; Pub. L. 109-59, title X, Sec. 10143, Aug. 10, 2005, 119 Stat. 1931; Pub. L. 109-74, title I, Sec. 102, title II, Sec. 203, Sept. 29, 2005, 119 Stat. 2030, 2032; renumbered Sec. 13107 and amended Pub. L. 109-304, Sec. 16(b)(1), (c)(5), Oct. 6, 2006, 120 Stat. 1705, 1706.)

**-MISC1-**

**HISTORICAL AND REVISION NOTES**

Revised section	Source section (U.S. Code)
13106	46:1479

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Section 13106 provides the Secretary with liquidating contract authority in an amount equal to the revenues received from the motor boat fuel tax. One third shall be used for State boating safety programs, and 2/3 shall be used for State facilities improvement programs. And as provided in Section 13102(f), the approval of a State's program makes it a contractual obligation of the United States Government to provide the amounts available.

-REFTEXT-

**REFERENCES IN TEXT**

Section 15 of the Dingell-Johnson Sport Fish Restoration Act, referred to in subsec. (a)(1), is classified to section 777n of Title 16, Conservation.

-MISC2-

**PRIOR PROVISIONS**

A prior section 13107, Pub. L. 98-89, Aug. 26, 1983, 97 Stat. 596, established the National Recreational Boating Safety and Facilities Improvement Fund, prior to repeal by Pub. L. 98-369, div. A, title X, Sec. 1016(c)(1), July 18, 1984, 98 Stat. 1020. See section 9504 of Title 26, Internal Revenue Code.

**AMENDMENTS**

2006 - Pub. L. 109-304, Sec. 16(b)(1), renumbered section 13106 of this title as this section.

Subsec. (a)(1). Pub. L. 109-304, Sec. 16(c)(5), substituted "section 13104" for "section 13103".

2005 - Subsec. (a)(1). Pub. L. 109-59, Sec. 10143(2), as amended by Pub. L. 109-74, Sec. 102(2), substituted "subsections (a)(2) and (f) of section 4 of the Dingell-Johnson Sport Fish Restoration Act (16 U.S.C. 777c(a)(2) and (f))" for "section 4(b) of the Act of August 9, 1950 (16 U.S.C. 777c(b))".

Pub. L. 109-59, Sec. 10143(1), as amended by Pub. L. 109-74, Sec. 102(1), substituted "the amount made available from the Boat Safety Account for that fiscal year under section 15 of the Dingell-Johnson Sport Fish Restoration Act" for "the amount appropriated from the Boat Safety Account for that fiscal year".

Subsec. (a)(2). Pub. L. 109-59, Sec. 10143(3), struck out "not less than one percent and" before "not more than two percent".

Subsec. (c)(1). Pub. L. 109-74, Sec. 203, substituted "\$5,000,000" for "\$4,150,685" and "\$2,000,000" for "\$1,660,274".

Pub. L. 109-59, Sec. 10143(4)(D), as amended by Pub. L. 109-74, Sec. 102(3)(B), amended par. (1) as amended by Pub. L. 109-74, Sec. 203, by inserting "not less than" before "\$2,000,000". See Effective Date of 2005 Amendments note below.

Pub. L. 109-59, Sec. 10143(4)(C), as amended by Pub. L. 109-74, Sec. 102(3)(B), amended par. (1) as amended by Pub. L. 109-74, Sec. 203, by substituting "\$5,500,000" for "\$5,000,000". See Effective

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Date of 2005 Amendments note below.

Pub. L. 109-59, Sec. 10143(4)(B), as amended by Pub. L. 109-74, Sec. 102(3)(A), substituted "(16 U.S.C. 777c(a)(2))" for "(16 U.S.C. 777c(b))".

Pub. L. 109-59, Sec. 10143(4)(A), substituted "Secretary under subsection (a)(2) of section 4" for "Secretary of Transportation under paragraph (5)(C) of section 4(b)".

Pub. L. 109-40 substituted "\$4,150,685" for "\$4,100,000" and "\$1,660,274" for "\$1,643,836".

Pub. L. 109-37 substituted "\$4,100,000" for "\$4,050,000" and "\$1,643,836" for "\$1,620,003".

Pub. L. 109-35 substituted "\$4,050,000" for "\$4,000,000" and "\$1,620,003" for "\$1,600,000".

Pub. L. 109-20 substituted "\$4,000,000" for "\$3,750,003" and "\$1,600,000" for "\$1,500,003".

Pub. L. 109-14 substituted "\$3,750,003" for "\$3,333,336" and "\$1,500,003" for "\$1,333,336".

Subsec. (c)(3). Pub. L. 109-59, Sec. 10143(5), as amended by Pub. L. 109-74, Sec. 102(4), substituted "during the 2 succeeding fiscal years. Any amount that is unexpended or unobligated at the end of the 3-year period during which it is available shall be withdrawn by the Secretary and allocated to the States in addition to any other amounts available for allocation in the fiscal year in which they are withdrawn or the following fiscal year." for "until expended."

2004 - Subsec. (c). Pub. L. 108-310 amended subsec. (c) generally. Prior to amendment, subsec. (c) read as follows: "Of the amount transferred to the Secretary of Transportation under paragraph (4) of section 4(b) of the Dingell-Johnson Sport Fish Restoration Act (16 U.S.C. 777c(b)), \$5,000,000 is available to the Secretary for payment of expenses of the Coast Guard for personnel and activities directly related to coordinating and carrying out the national recreational boating safety program under this title, of which \$2,000,000 shall be available to the Secretary only to ensure compliance with chapter 43 of this title. No funds available to the Secretary under this subsection may be used to replace funding traditionally provided through general appropriations, nor for any purposes except those purposes authorized by this section. Amounts made available by this subsection shall remain available until expended. The Secretary shall publish annually in the Federal Register a detailed accounting of the projects, programs, and activities funded under this subsection."

Pub. L. 108-280 substituted "\$5,000,000" for "\$4,166,668" and "\$2,000,000" for "\$1,666,668".

Pub. L. 108-263 substituted "\$4,166,668" for "\$3,750,001" and "\$1,666,668" for "\$1,500,001".

Pub. L. 108-224 substituted "\$3,750,001" for "\$2,916,667" and "\$1,500,001" for "\$1,166,667".

Pub. L. 108-202 substituted "\$2,916,667" for "\$2,083,333" and

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"\$1,166,667" for "\$833,333".

2003 - Subsec. (c). Pub. L. 108-88 amended first sentence generally. Prior to amendment, first sentence read as follows: "Of the amount transferred for each fiscal year to the Secretary of Transportation under paragraphs (2) and (3) of section 4(b) of the Act of August 9, 1950 (16 U.S.C. 777c(b)), \$5,000,000 is available to the Secretary for payment of expenses of the Coast Guard for personnel and activities directly related to coordinating and carrying out the national recreational boating safety program under this title, of which \$2,000,000 shall be available to the Secretary only to ensure compliance with chapter 43 of this title."

1998 - Pub. L. 105-178, Sec. 7405(c)(1), substituted "appropriations" for "contract spending" in section catchline.

Subsec. (a)(1). Pub. L. 105-178, Sec. 7405(b)(1), substituted "Subject to paragraph (2) and subsection (c), the Secretary shall expend in each fiscal year for State recreational boating safety programs, under contracts with States under this chapter, an amount equal to the sum of (A) the amount appropriated from the Boat Safety Account for that fiscal year and (B) the amount transferred to the Secretary under section 4(b) of the Act of August 9, 1950 (16 U.S.C. 777c(b))." for "Subject to paragraph (2), the Secretary may expend in each fiscal year, subject to amounts as are provided in appropriations laws for liquidation of contract authority, an amount equal to 1/2 of the amount transferred for such fiscal year to the Boat Safety Account under section 9503(c)(4) of the Internal Revenue Code of 1986 (26 U.S.C. 9503(c)(4))."

Subsec. (a)(2). Pub. L. 105-178, Sec. 7405(b)(2), substituted "available" for "appropriated".

Subsec. (c). Pub. L. 105-178, Sec. 7405(b)(3), added subsec. (c) and struck out former subsec. (c) which read as follows: "An amount equal to one-half of the amount transferred for each fiscal year to the Boat Safety Account under section 9503(c)(4) of the Internal Revenue Code of 1986 (26 U.S.C. 9503(c)(4)) is available to the Secretary for expenditures out of the operating expenses account of the Coast Guard for services provided by the Coast Guard for recreational boating safety, including services provided by the Coast Guard Auxiliary. Expenditures for a fiscal year under this subsection shall not exceed expenditures for the fiscal year under subsection (a). Amounts made available by this subsection shall remain available until expended."

1988 - Subsec. (a). Pub. L. 100-448, Sec. 61(b)(1)(A), designated existing provisions as par. (1), added par. (2), and amended first sentence of par. (1) generally. Prior to amendment, first sentence read as follows: "The Secretary may expend in each of the fiscal years 1985, 1986, 1987, and 1988, subject to amounts as are provided in appropriations laws for liquidation of contract authority, an amount equal to one-half for Fiscal Year 1987 and two-thirds for each Fiscal Year thereafter of the amount transferred for such fiscal year to the Boat Safety Account under section

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9503(c)(4) of the Internal Revenue Code of 1986 (26 U.S.C. 9503(c)(4))."

Subsec. (c). Pub. L. 100-448, Sec. 6(b)(2)(A), struck out "for Fiscal Year 1987 and one-third for each fiscal year thereafter." after "An amount equal to one-half" in first sentence.

Pub. L. 100-448, Sec. 6(b)(6), substituted "1986" for "1954" in first sentence.

Pub. L. 100-448, Sec. 6(b)(2)(B), inserted after first sentence "Expenditures for a fiscal year under this subsection shall not exceed expenditures for the fiscal year under subsection (a)."

1986 - Subsec. (a). Pub. L. 99-640, Sec. 7(c), substituted "one-half for Fiscal Year 1987 and two-thirds for each Fiscal Year thereafter" for "two-thirds".

Subsec. (b). Pub. L. 99-626 substituted "shall" for "may" after "Those purposes" in introductory provisions and substituted "and" for "or" in par. (8).

Subsec. (c). Pub. L. 99-640, Sec. 7(b), substituted "one-half for Fiscal Year 1987 and one-third for each Fiscal Year thereafter." for "one-third".

1984 - Pub. L. 98-369 amended section generally and, among other changes, struck out all references to a facilities improvement program, inserted provisions directing the Secretary to establish guidelines prescribing the purposes for which amounts available under this chapter for State recreational safety boating programs may be used, and made available to the Secretary an amount equal to one-third of the amount transferred for each fiscal year to the Boat Safety Account under section 9503(c)(4) of title 26 to be used for expenditures out of the operating expenses account of the Coast Guard for services provided by the Coast Guard for recreational boating safety, including services provided by the Coast Guard Auxiliary.

**EFFECTIVE DATE OF 2005 AMENDMENTS**

From Aug. 10, 2005, to end of fiscal year 2005, subsecs. (a) and (c)(1), (3) of this section considered to read as immediately before enactment of Pub. L. 109-59, except as provided by the amendments by section 203 of Pub. L. 109-74, see section 101(b) of Pub. L. 109-74, set out as a note under section 777b of Title 16, Conservation.

Amendment by Pub. L. 109-59 effective Oct. 1, 2005, see section 10102 of Pub. L. 109-59, set out as a note under section 777b of Title 16, Conservation.

**EFFECTIVE DATE OF 1988 AMENDMENT**

Amendment by Pub. L. 100-448 effective Oct. 1, 1988, see section 6(e) of Pub. L. 100-448, set out as a note under section 777 of Title 16, Conservation.

**EFFECTIVE DATE OF 1984 AMENDMENT**

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Amendment by Pub. L. 98-369 effective Oct. 1, 1984, to apply with respect to fiscal years beginning after Sept. 30, 1984, see section 1013 of Pub. L. 98-369, set out as a note under section 13101 of this title.

**BOATING SAFETY FUND**

Pub. L. 99-272, title VI, Sec. 6001, Apr. 7, 1986, 100 Stat. 121, as amended by Pub. L. 99-514, Sec. 2, Oct. 22, 1986, 100 Stat. 2095, provided that: "An amount equal to one-third of the amount transferred for fiscal year 1985 to the Boat Safety Account under section 9503(c)(4) of the Internal Revenue Code of 1986 (26 U.S.C. 9503(c)(4)) shall be deposited in the general fund of the Treasury as proprietary receipts of the department in which the Coast Guard is operating and ascribed to Coast Guard activities. Section 13106(a) of title 46, United States Code, shall be applied with respect to fiscal year 1985 by substituting 'one-third' for 'two-thirds' in the first sentence."

-End-

-CITE-

46 USC Sec. 13108

02/01/2010

-EXPCITE-

TITLE 46 - SHIPPING

Subtitle II - Vessels and Seamen

Part I - State Boating Safety Programs

CHAPTER 131 - RECREATIONAL BOATING SAFETY

-HEAD-

Sec. 13108. Computing amounts allocated to States and State records requirements

-STATUTE-

(a) Amounts allocated and distributed under section 13104 of this title shall be computed and paid to the States as follows:

(1) During the second quarter of a fiscal year and on the basis of computations made under section 13106 of this title and submitted by the States for the preceding fiscal year, the Secretary shall determine the percentage of the amounts available to which each eligible State is entitled for the next fiscal year.

(2) Notice of the percentage and of the dollar amount, if it can be determined, for each State shall be provided to the States at the earliest practicable time.

(3) If the Secretary determines that an amount made available to a State for a prior fiscal year is greater or less than the

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amount that should have been made available to the State for the prior fiscal year, because of later or more accurate State expenditure information, the amount for the current fiscal year may be increased or decreased by the appropriate amount.

(b) The Secretary shall schedule the payment of amounts, consistent with the program purposes and applicable regulations prescribed by the Secretary of the Treasury, to minimize the time elapsing between the transfer of amounts from the Treasury and the subsequent disbursement of the amounts by a State.

(c) The Secretary shall notify a State authority or agency that further payments will be made to the State only when the program complies with the prescribed standards or a failure to comply substantially with standards is corrected if the Secretary, after reasonable notice to the designated State authority or agency, finds that -

(1) the State recreational boating safety program submitted by the State and accepted by the Secretary has been so changed that it no longer complies with this chapter or standards prescribed by regulations; or

(2) in carrying out the State recreational boating safety program, there has been a failure to comply substantially with the standards prescribed by regulations.

(d) The Secretary shall provide for the accounting, budgeting, and other fiscal procedures that are necessary and reasonable to carry out this section properly and efficiently. Records related to amounts allocated under this chapter shall be made available to the Secretary and the Comptroller General to conduct audits.

**-SOURCE-**

(Pub. L. 98-89, Aug. 26, 1983, 97 Stat. 596; Pub. L. 98-369, div. A, title X, Sec. 1011(f), July 18, 1984, 98 Stat. 1013; Pub. L. 101-595, title III, Sec. 312(d), Nov. 16, 1990, 104 Stat. 2987; Pub. L. 104-324, title VII, Sec. 746(a)(3), (4), Oct. 19, 1996, 110 Stat. 3943; Pub. L. 109-304, Sec. 16(c)(6), Oct. 6, 2006, 120 Stat. 1706.)

**-MISC1-**

**HISTORICAL AND REVISION NOTES**

Revised section	Source section (U.S. Code)
13108	46:1480

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Section 13108 sets forth the manner that the Secretary shall compute the amounts to be allocated to the States, State record requirements, and authority for the General Accounting Office to review the records when conducting audits.

**AMENDMENTS**

2006 - Subsec. (a). Pub. L. 109-304 substituted "section 13104" for "section 13103" in introductory provisions and "section 13106" for "section 13105" in par. (1).

1996 - Subsec. (a)(1). Pub. L. 104-324 substituted "preceding" for "proceeding" and "Secretary" for "Secertary".

1990 - Subsec. (a)(1). Pub. L. 101-595 amended par. (1) generally. Prior to amendment, par. (1) read as follows: "During the last quarter of a fiscal year and on the basis of computations made under section 13105 of this title and submitted by the States, the Secretary shall determine the percentage of the amounts available for the next fiscal year to which each eligible State is entitled."

1984 - Subsec. (c)(1), (2). Pub. L. 98-369 struck out "and facilities improvement" after "boating safety".

**EFFECTIVE DATE OF 1984 AMENDMENT**

Amendment by Pub. L. 98-369 effective Oct. 1, 1984, to apply with respect to fiscal years beginning after Sept. 30, 1984, see section 1013 of Pub. L. 98-369, set out as a note under section 13101 of this title.

-End-

-CITE-

46 USC Sec. 13109

02/01/2010

-EXPCITE-

TITLE 46 - SHIPPING

Subtitle II - Vessels and Seamen

Part I - State Boating Safety Programs

CHAPTER 131 - RECREATIONAL BOATING SAFETY

-HEAD-

Sec. 13109. Consultation, cooperation, and regulation

-STATUTE-

(a) In carrying out responsibilities under this chapter, the Secretary may consult with State and local governments, public and private agencies, organizations and committees, private industry, and other persons having an interest in boating safety.

(b) The Secretary may advise, assist, and cooperate with the

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States and other interested public and private agencies in planning, developing, and carrying out boating safety programs. Acting under section 141 of title 14, the Secretary shall ensure the fullest cooperation between the State and United States Government authorities in promoting boating safety by making agreements and other arrangements with States when possible. Subject to chapter 23 of title 14, the Secretary may make available, on request of a State, the services of members of the Coast Guard Auxiliary to assist the State in promoting boating safety on State waters.

(c) The Secretary may prescribe regulations to carry out this chapter.

**-SOURCE-**

(Pub. L. 98-89, Aug. 26, 1983, 97 Stat. 597; Pub. L. 98-369, div. A, title X, Sec. 1011(g), July 18, 1984, 98 Stat. 1013.)

**-MISC1-**

**HISTORICAL AND REVISION NOTES**

Revised section	Source section (U.S. Code)
13109	46:1481

Section 13109 authorizes the Secretary to consult with State and local governments, public and private agencies, and any other persons that have an interest in boating safety.

This section also authorizes the Secretary to advise and assist the States and other public and private agencies in the planning and carrying out of their boating safety and facilities improvement programs.

**AMENDMENTS**

1984 - Subsec. (a). Pub. L. 98-369 struck out "and facilities improvement" after "boating safety".

Subsec. (b). Pub. L. 98-369 struck out "and facilities improvement" after "and carrying out boating safety".

**EFFECTIVE DATE OF 1984 AMENDMENT**

Amendment by Pub. L. 98-369 effective Oct. 1, 1984, to apply with respect to fiscal years beginning after Sept. 30, 1984, see section 1013 of Pub. L. 98-369, set out as a note under section 13101 of this title.

**-End-**

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-CITE-

46 USC Sec. 13110

02/01/2010

-EXPCITE-

TITLE 46 - SHIPPING

Subtitle II - Vessels and Seamen

Part I - State Boating Safety Programs

CHAPTER 131 - RECREATIONAL BOATING SAFETY

-HEAD-

Sec. 13110. National Boating Safety Advisory Council

-STATUTE-

(a) The Secretary shall establish a National Boating Safety Advisory Council. The Council shall consist of 21 members appointed by the Secretary, whom the Secretary considers to have a particular expertise, knowledge, and experience in recreational boating safety.

(b)(1) The membership of the Council shall consist of -

(A) 7 representatives of State officials responsible for State boating safety programs;

(B) 7 representatives of recreational vessel manufacturers and associated equipment manufacturers; and

(C) 7 representatives of national recreational boating organizations and from the general public, at least 5 of whom shall be representatives of national recreational boating organizations.

(2) Additional individuals from the sources referred to in paragraph (1) of this subsection may be appointed to panels of the Council to assist the Council in performing its duties.

(3) At least once a year, the Secretary shall publish a notice in the Federal Register soliciting nominations for membership on the Council.

(c) In addition to the consultation required by section 4302 of this title, the Secretary shall consult with the Council on other major boating safety matters related to this chapter. The Council may make available to Congress information, advice, and recommendations that the Council is authorized to give to the Secretary.

(d) When attending meetings of the Council, a member of the Council or a panel may be paid at a rate not more than the rate for GS-18. When serving away from home or regular place of business, the member may be allowed travel expenses, including per diem in lieu of subsistence as authorized by section 5703 of title 5 for individuals employed intermittently in the Government service. A

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payment under this section does not make a member of the Council an officer or employee of the United States Government for any purpose.

(e) The Council shall terminate on September 30, 2010.

**-SOURCE-**

(Pub. L. 98-89, Aug. 26, 1983, 97 Stat. 598; Pub. L. 99-626, Sec. 3(a)(1), (b)(1), (2), Nov. 7, 1986, 100 Stat. 3505; Pub. L. 100-448, Sec. 20(a), Sept. 28, 1988, 102 Stat. 1846; Pub. L. 102-241, Sec. 24, Dec. 19, 1991, 105 Stat. 2217; Pub. L. 104-324, title III, Sec. 304(f), Oct. 19, 1996, 110 Stat. 3918; Pub. L. 107-295, title III, Sec. 335, Nov. 25, 2002, 116 Stat. 2105; Pub. L. 108-293, title IV, Sec. 418(f), Aug. 9, 2004, 118 Stat. 1049.)

**-MISC1-**

**HISTORICAL AND REVISION NOTES**

Revised section	Source section (U.S. Code)
13110	46:1482

Section 13110 establishes the National Boating Safety Advisory Council, the membership of the council, and compensation for individuals serving on the council. This council is to be established consistent with the Federal Advisory Committee Act (P.L. 92-463; 5 U.S.C. App.).

**AMENDMENTS**

2004 - Subsec. (e). Pub. L. 108-293 substituted "September 30, 2010" for "September 30, 2005".

2002 - Subsec. (e). Pub. L. 107-295 substituted "September 30, 2005" for "September 30, 2000".

1996 - Subsec. (e). Pub. L. 104-324 substituted "2000" for "1996".

1991 - Subsec. (e). Pub. L. 102-241 substituted "1996" for "1991".

1988 - Subsec. (b)(1). Pub. L. 100-448 substituted "representatives of" for "members from" wherever appearing.

1986 - Subsec. (a). Pub. L. 99-626, Sec. 3(b)(1), struck out "not more than" before "21 members" and inserted "recreational" after "experience in".

Subsec. (b)(1). Pub. L. 99-626, Sec. 3(b)(2), amended par. (1) generally. Prior to amendment, par. (1) read as follows: "Insofar as practical and to ensure balanced representation, the Secretary shall appoint members equally from -

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"(A) State officials responsible for State boating safety programs;

"(B) recreational vessel manufacturers; and

"(C) boating organizations and members of the general public."

Subsec. (e). Pub. L. 99-626, Sec. 3(a)(1), added subsec. (e).

**REFERENCES IN OTHER LAWS TO GS-16, 17, OR 18 PAY RATES**

References in laws to the rates of pay for GS-16, 17, or 18, or to maximum rates of pay under the General Schedule, to be considered references to rates payable under specified sections of Title 5, Government Organization and Employees, see section 529 [title I, Sec. 101(c)(1)] of Pub. L. 101-509, set out in a note under section 5376 of Title 5.

**IMPLEMENTATION OF 1988 AMENDMENT**

Pub. L. 100-448, Sec. 20(b), Sept. 28, 1988, 102 Stat. 1846, provided that: "The Secretary of the department in which the Coast Guard is operating shall carry out the amendments made by subsection (a) [amending this section] as vacancies in the membership of the National Boating Safety Advisory Council occur."

[For transfer of authorities, functions, personnel, and assets of the Coast Guard, including the authorities and functions of the Secretary of Transportation relating thereto, to the Department of Homeland Security, and for treatment of related references, see sections 468(b), 551(d), 552(d), and 557 of Title 6, Domestic Security, and the Department of Homeland Security Reorganization Plan of November 25, 2002, as modified, set out as a note under section 542 of Title 6.]

**IMPLEMENTATION OF 1986 AMENDMENT**

Pub. L. 99-626, Sec. 3(b)(3), Nov. 7, 1986, 100 Stat. 3505, provided that: "The Secretary of Transportation shall carry out the amendments made by paragraph (2) [amending this section] as vacancies in the membership of the National Boating Safety Advisory Council occur."

-End-

-CITE-

46 USC Part J - Measurement of Vessels

02/01/2010

-EXPCITE-

TITLE 46 - SHIPPING

Subtitle II - Vessels and Seamen

Part J - Measurement of Vessels

-HEAD-

PART J - MEASUREMENT OF VESSELS

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-MISC1-

**HISTORICAL AND REVISION NOTES**

Part J contains provisions that apply to the measurement of a vessel to determine its tonnage. Tonnage is a measurement of a vessel's volume and is used for international, customs, and regulatory purposes. This part implements the 1969 International Convention on Tonnage Measurement of Ships and provides a framework for phasing in the international system as the method of measuring ships domestically, to establish uniformity in ship measurement. The availability of an alternate domestic regulatory system of measurement is continued so that the application of domestic laws will be preserved in order that vessels engaged in domestic commerce will not be adversely affected.

-End-

**462A.52 FEES REMITTED TO COMMISSION.**

1. Within ten days after the end of each month, a county recorder shall remit to the commission all fees collected by the recorder during the previous month. Before May 10 of the registration period beginning May 1 of that year, a county recorder shall remit to the commission all unused license blanks for the previous registration period. All fees collected for the registration of vessels shall be forwarded by the commission to the treasurer of the state, who shall place the money in the state fish and game protection fund. The money so collected is appropriated to the commission solely for the administration and enforcement of navigation laws and water safety.

2. Notwithstanding subsection 1, any increase in revenues received on or after July 1, 2007, but on or before June 30, 2013, pursuant to this section as a result of fee increases pursuant to 2005 Acts, ch. 137, shall be used by the commission only for the administration and enforcement of programs to control aquatic invasive species and for the administration and enforcement of navigation laws and water safety upon the inland waters of this state and shall be used in addition to funds already being expended by the commission each year for these purposes. The commission shall not reduce the amount of other funds being expended on an annual basis for these purposes as of July 1, 2005, during the period of the appropriation provided for in this subsection.

3. The commission shall submit a written report to the general assembly by December 31, 2007, and by December 31 of each year thereafter through December 31, 2013, summarizing the activities of the department in administering and enforcing programs to control aquatic invasive species and administering and enforcing navigation laws and water safety upon the inland waters of the state. The report shall include information concerning the amount of revenues

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collected pursuant to this section as a result of fee increases pursuant to 2005 Acts, ch. 137, and how the revenues were expended. The report shall also include information concerning the amount and source of all other funds expended by the commission during the year for the purposes of administering and enforcing programs to control aquatic invasive species and administering and enforcing navigation laws and water safety upon the inland waters of the state and how the funds were expended.

**456A.27 FEDERAL WILDLIFE ACT -- ASSENT.**

The state of Iowa assents to the provisions of the Act of Congress entitled "An Act To Provide That The United States Shall Aid The States In Wildlife Restoration Projects, And For Other Purposes", approved September 2, 1937, 50 Stat. 917, and the department may perform acts as necessary to the conduct and establishment of cooperative wildlife restoration projects, as defined in the Act of Congress, in compliance with the Act and with regulations promulgated by the secretary of agriculture under the Act. No funds accruing to the state of Iowa from license fees paid by hunters shall be diverted for any other purpose than as set out in sections 456A.17 and 456A.19.

**456A.28 FISH RESTORATION PROJECTS.**

The state of Iowa assents to the provisions of the Act of Congress entitled "An Act To Provide That The United States Shall Aid The States In Fish Restoration Projects, And For Other Purposes", approved August 9, 1950, Pub. L. No. 681, and the department may perform acts as necessary to the conduct and establishment of cooperative fish restoration projects, as defined in the Act of Congress, in compliance with the Act and with regulations promulgated by the secretary of the interior under the Act. No funds accruing to the state of Iowa from fishing license fees shall be diverted for any other purposes than as set out in sections 456A.17 and 456A.19.

**456A.17 FUNDS -- RESTRICTIONS.**

The following four funds are created in the state treasury:

1. A state fish and game protection fund.
2. A state conservation fund.
3. An administration fund.
4. A county conservation board fund.

The state fish and game protection fund, except as otherwise provided, consists of all moneys accruing from license fees and all other sources of revenue arising under the fish and wildlife programs. Notwithstanding section 12C.7, subsection 2, interest or earnings on investments or time deposits of the moneys in the state fish and game protection fund shall be credited to that fund.

The county conservation board fund consists of all moneys credited

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to it by law or appropriated to it by the general assembly.

The conservation fund, except as otherwise provided, consists of all other funds accruing to the department for the purposes embraced by this chapter.

The administration fund shall consist of an equitable portion of the gross amount of the state fish and game protection fund and the state conservation fund, to be determined by the commission, sufficient to pay the expense of administration entailed by this chapter.

All receipts and refunds and reimbursements related to activities funded by the administration fund are appropriated to the administration fund. All refunds and reimbursements relating to activities of the state fish and game protection fund shall be credited to the state fish and game protection fund.

Notwithstanding section 8.33, revenues deposited in the state conservation fund, and remaining in the state conservation fund on June 30 of any fiscal year shall not revert to the general fund of the state but shall remain available for expenditure for one year after the close of the fiscal year during which such revenues were deposited. Any such revenues remaining unexpended at the end of the one-year period during which the revenues are available for expenditure shall revert to the general fund of the state.

The department may apply for a loan for the construction of facilities for the collection and treatment of waste water under the state water pollution control works and drinking water facilities financing program as established in sections 455B.291 through 455B.299. In order to provide for the repayment of a loan granted under the financing program, the commission may impose a lien on not more than ten percent of the annual revenues from user fees and related revenue derived from park and recreation areas under chapter 461A which are deposited in the state conservation fund. If a lien is established as provided in this paragraph, repayment of the loan is the first priority on the revenues received and dedicated for the loan repayment each year.

**456A.19 EXPENDITURES.**

All funds accruing to the fish and game protection fund, except an equitable portion of the administration fund, shall be expended solely in carrying on fish and wildlife activities. Expenditures incurred by the department in carrying on the activities shall be only on authorization by the general assembly.

The department shall by October 1 of each year submit to the department of management for transmission to the general assembly a detailed estimate of the amount required by the department during the succeeding year for carrying on fish and wildlife activities. The estimate shall be in the same general form and detail as required by law in estimates submitted by other state departments.

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Any unexpended balance at the end of the biennium shall revert to the fish and game protection fund.

All administrative expense shall be paid from the administration fund.

All other expenditures shall be paid from the conservation fund.

All expenditures under this chapter are subject to approval by the director of management and the director of the department of administrative services.

All moneys credited to the county conservation board fund shall be used to provide grants to county conservation boards to provide funding for the purposes of chapter 350. These grants are in addition to moneys appropriated to the conservation boards from the county boards of supervisors. The grants shall be made to the conservation boards based upon the needs of the boards. Applications shall be made by the boards to the commission.

**Iowa Constitution, Article VII, Sec. 9: Fish and wildlife protection funds.** SEC. 9. All revenue derived from state license fees for hunting, fishing, and trapping, and all state funds appropriated for, and federal or private funds received by the state for, the regulation or advancement of hunting, fishing, or trapping, or the protection, propagation, restoration, management, or harvest of fish or wildlife, shall be used exclusively for the performance and administration of activities related to those purposes.

Added 1996, Amendment [\[44\]](#)

**§ 13101. — State recreational boating safety programs.**

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[CITE: **46USC13101**]

TITLE 46--SHIPPING

Subtitle II--Vessels and Seamen

Part I--State Boating Safety Programs

CHAPTER 131--RECREATIONAL BOATING SAFETY

Sec. 13101. State recreational boating safety programs

(a) To encourage greater State participation and uniformity in boating safety efforts, and particularly to permit the States to assume the greater share of boating safety education, assistance, and enforcement activities, the Secretary shall carry out a national

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recreational boating safety program. Under this program, the Secretary shall make contracts with, and allocate and distribute amounts to, eligible States to assist them in developing, carrying out, and financing State recreational boating safety programs.

(b) The Secretary shall establish guidelines and standards for the program. In doing so, the Secretary--

(1) shall consider, among other things, factors affecting recreational boating safety by contributing to overcrowding and congestion of waterways, such as the increasing number of recreational vessels operating on those waterways and their geographic distribution, the availability and geographic distribution of recreational boating facilities in and among applying States, and State marine casualty and fatality statistics for recreational vessels;

(2) shall consult with the Secretary of the Interior to minimize duplication with the purposes and expenditures of the Land and Water Conservation Fund Act of 1965 (16 U.S.C. 4601-4--4601-11) the Federal Aid in Sport Fish Restoration Act of 1950 (16 U.S.C. 777-777k), and with the guidelines developed under those Acts; and

(3) shall maintain environmental standards consistent with the Coastal Zone Management Act of 1972 (16 U.S.C. 1451-1464) and other laws and policies of the United States intended to safeguard the ecological and esthetic quality of the waters and wetlands of the United States.

(c) A State whose recreational boating safety program has been approved by the Secretary is eligible for allocation and distribution of amounts under this chapter to assist that State in developing, carrying out, and financing its program. Matching amounts shall be allocated and distributed among eligible States by the Secretary as provided by section 13103 of this title.

(Pub. L. 98-89, Aug. 26, 1983, 97 Stat. 592; Pub. L. 98-369, div. A, title X, Sec. 1011(b), July 18, 1984, 98 Stat. 1013; Pub. L. 101-595, title III, Sec. 312(a), Nov. 16, 1990, 104 Stat. 2987.)

Historical and Revision Notes

Revised section	Source section (U.S. Code)
13101.....	46:1474

Section 13101(a) authorizes the Secretary to make contracts with, and allocate amounts to eligible States to assist them in carrying out their recreational boating safety and facilities improvement programs.

Subsection (b) requires the Secretary to establish guidelines and standards for the program, and specifies specific conditions the Secretary must consider, requires consultation with the Secretary of the

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Interior, and to maintain environmental standards consistent with the Coastal Zone Management Act.

Subsection (c) makes the States who meet the standards prescribed by the Secretary eligible for the amounts authorized under this chapter.

References in Text

The Land and Water Conservation Fund Act of 1965, referred to in subsec. (b)(2), is Pub. L. 88-578, Sept. 3, 1964, 78 Stat. 897, as amended, which is classified generally to part B (Sec. 4601-4 et seq.) of subchapter LXIX of chapter 1 of Title 16, Conservation. For complete classification of this Act to the Code, see Short Title note set out under section 4601-4 of Title 16 and Tables.

The Federal Aid in Sport Fish Restoration Act of 1950, referred to in subsec. (b)(2), is act Aug. 9, 1950, ch. 658, 64 Stat. 430, as amended, also known as the Dingell-Johnson Sport Fish Restoration Act, the Federal Aid in Fish Restoration Act, and the Fish Restoration and Management Projects Act, which is classified generally to chapter 10B (Sec. 777 et seq.) of Title 16. For complete classification of this Act to the Code, see Short Title note set out under section 777 of Title 16 and Tables.

The Coastal Zone Management Act of 1972, referred to in subsec. (b)(3), is title III of Pub. L. 89-454 as added by Pub. L. 92-583, Oct. 27, 1972, 86 Stat. 1280, as amended, which is classified generally to chapter 33 (Sec. 1451 et seq.) of Title 16. For complete classification of this Act to the Code, see Short Title note set out under section 1451 of Title 16 and Tables.

Amendments

1990--Subsec. (b)(2). Pub. L. 101-595 substituted ``the Federal Aid in Sport Fish Restoration Act of 1950 (16 U.S.C. 777-777k), and with the guidelines developed under those Acts; and" for ``and with the guidelines developed under that Act; and".

1984--Subsec. (a). Pub. L. 98-369, Sec. 1011(b), struck out ``and facility improvement" after ``in boating safety", struck out ``and facilities improvement" in two places after ``recreational boating safety", and substituted ``shall" for ``may" in second sentence.

Subsec. (c). Pub. L. 98-369, Sec. 1011(b)(1)(B), struck out ``and facilities improvement" after ``recreational boating safety".

Effective Date of 1984 Amendment

Section 1013 of subpart A (Secs. 1010-1013) of part I of subtitle B of title X of division A of Pub. L. 98-369 provided that: ``The amendments made by this subpart [amending this section and sections 2102, 13102, 13103, 13105, 13106, 13108, and 13109 of this title and

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**APPENDIX F - Federal Codes and Rules for Funding Use**

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enacting a provision set out as a note under this section] shall take effect on October 1, 1984, and shall apply with respect to fiscal years beginning after September 30, 1984."

Short Title of 1986 Amendment

Pub. L. 99-626, Sec. 1, Nov. 7, 1986, 100 Stat. 3504, provided that: ``This act [amending sections 13102, 13106, and 13110 of this title and section 1464 of Title 16, Conservation, and enacting provisions set out as notes under section 13110 of this title and section 1456a of Title 16] may be cited as the `Recreational Boating Safety Act of 1986'."

Survey of Fuel Use by Recreational Vessels

Pub. L. 100-448, Sec. 6(d), Sept. 28, 1988, 102 Stat. 1841, provided that:

``(1) In general.--The Secretary of Transportation and the Secretary of the Interior shall jointly conduct a survey of--

``(A) the number, size, and primary uses of recreational vessels operating on the waters of the United States; and

``(B) the amount and types of fuel used by those vessels.

``(2) Authorization of contracts.--The Secretary of Transportation and the Secretary of the Interior may enter into contracts for the performance of a survey pursuant to this subsection.

``(3) Report.--The Secretary of the Interior and the Secretary of Transportation shall jointly submit a report to the Speaker of the House of Representatives and to the President pro tempore of the Senate which describes the results of the survey conducted pursuant to this section not later than November 15, 1992.

``(4) Funding.--Activities under this subsection may be carried out--

``(A) using amounts available to the Secretary of the Interior for administrative expenses under the Act entitled `An Act to provide that the United States shall aid the States in fish restoration and management projects, and for other purposes' (64 Stat. 430; 16 U.S.C. 777 et seq.); and

``(B) subject to appropriations, using amounts available to the Secretary of Transportation under section 13106(a)(1) of title 46, United States Code (as amended by this Act)."

Congressional Declaration of Policy for 1984 Amendment

Section 1010 of part I (Secs. 1010-1017) of subtitle B of title X of division A of Pub. L. 98-369 provided that: ``It is declared to be the policy of Congress and the purpose of this part [enacting sections 4162 and 9504 of Title 26, Internal Revenue Code, amending this section,

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**APPENDIX F - Federal Codes and Rules for Funding Use**

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sections 2102, 13102, 13103, 13105, 13106, 13108, and 13109 of this title, sections 777, 777b to 777e, 777g, and 777k of Title 16, Conservation, and sections 4161 and 9503 of Title 26, repealing section 13107 of this title, and enacting provisions set out as notes under this section, section 777 of Title 16, and sections 4161, 4162, and 9504 of Title 26] to improve recreational boating safety and to foster greater development, use, and enjoyment of all waters of the United States by encouraging and assisting participation by the States, the boating industry, and the boating public in activities related to increasing boating safety; by authorizing the establishment of national construction and performance standards for boats and associated equipment; by creating more flexible authority governing the use of boats and equipment; and by facilitating the provision of services by the United States Coast Guard on behalf of boating safety. It is further declared to be the policy of Congress to encourage greater and continuing uniformity of boating laws and regulations among the States and the Federal Government, to encourage and assist the States in exercising their authorities in boating safety, to foster greater cooperation and assistance between the Federal Government and the States in administering and enforcing Federal and State laws and regulations pertaining to boating safety, and to equitably utilize taxes paid on fuel use in motor boats in a manner which enhances boating safety."

[For transfer of authorities, functions, personnel, and assets of the Coast Guard, including the authorities and functions of the Secretary of Transportation relating thereto, to the Department of Homeland Security, and for treatment of related references, see sections 468(b), 551(d), 552(d), and 557 of Title 6, Domestic Security, and the Department of Homeland Security Reorganization Plan of November 25, 2002, as modified, set out as a note under section 542 of Title 6.]

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**APPENDIX F - CHAPTER 456A Regulation and Funding**

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**CHAPTER 456A REGULATION AND FUNDING - NATURAL RESOURCES DEPARTMENT**

[11/01/11 Full Chapter text can be found at: <http://www.legis.iowa.gov/DOCS/ACO/IC/LINC/Chapter.456a.pdf>]

**456A.17 FUNDS -- RESTRICTIONS.**

1. The following four funds are created in the state treasury:
  - a. A state fish and game protection fund.
  - b. A state conservation fund.
  - c. An administration fund.
  - d. A county conservation board fund.
2. The state fish and game protection fund, except as otherwise provided, consists of all moneys accruing from license fees and all other sources of revenue arising under the fish and wildlife programs. Notwithstanding section 12C.7, subsection 2, interest or earnings on investments or time deposits of the moneys in the state fish and game protection fund shall be credited to that fund.
3. The county conservation board fund consists of all moneys credited to it by law or appropriated to it by the general assembly.
4. The conservation fund, except as otherwise provided, consists of all other funds accruing to the department for the purposes embraced by this chapter.
5. The administration fund shall consist of an equitable portion of the gross amount of the state fish and game protection fund and the state conservation fund, to be determined by the commission, sufficient to pay the expense of administration entailed by this chapter.
6. All receipts and refunds and reimbursements related to activities funded by the administration fund are appropriated to the administration fund. All refunds and reimbursements relating to activities of the state fish and game protection fund shall be credited to the state fish and game protection fund.
7. Notwithstanding section 8.33, revenues deposited in the state conservation fund, and remaining in the state conservation fund on June 30 of any fiscal year shall not revert to the general fund of the state but shall remain available for expenditure for one year after the close of the fiscal year during which such revenues were deposited. Any such revenues remaining unexpended at the end of the one-year period during which the revenues are available for expenditure shall revert to the general fund of the state.
8. The department may apply for a loan for the construction of facilities for the collection and treatment of waste water and for the supply, treatment, and distribution of drinking water under the state water pollution control works and drinking water facilities financing program as established in sections 455B.291 through 455B.299. In order to provide for the repayment of a loan granted under the financing program, the commission may impose a lien on not more than ten percent of the annual revenues from user fees and related revenue derived from park and recreation areas under chapter 461A which are deposited in the state conservation fund. If a lien is established as provided in this paragraph, repayment of the loan is the first priority on the revenues received and dedicated for the loan repayment each year.

**456A.27 FEDERAL WILDLIFE ACT -- ASSENT.**

The state of Iowa assents to the provisions of the Act of Congress entitled "An Act To Provide That The United States Shall Aid The States In Wildlife Restoration Projects, And For Other Purposes", approved September 2, 1937, 50 Stat. 917, and the department may perform acts as necessary to the conduct and establishment of cooperative wildlife restoration projects, as defined in the Act of Congress, in compliance with the Act and with regulations promulgated by the secretary of agriculture under the Act. No funds accruing to the state of Iowa from license fees paid by hunters shall be diverted for any other purpose than as set out in sections 456A.17 and 456A.19.

**456A.28 FISH RESTORATION PROJECTS.**

The state of Iowa assents to the provisions of the Act of Congress entitled "An Act To Provide That The United States Shall Aid The States In Fish Restoration Projects, And For Other Purposes", approved August 9, 1950, Pub. L. No. 681, and the department may perform acts as necessary to the conduct and establishment of cooperative fish restoration projects, as defined in the Act of Congress, in compliance with the Act and with regulations promulgated by the secretary of the interior under the Act. No funds accruing to the state of Iowa from fishing license fees shall be diverted for any other purposes than as set out in sections 456A.17 and 456A.19.

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**APPENDIX G - IA Code 483A, Fishing and Hunting Licenses, Contraband, and Guns**

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**IOWA CODE 483A - FISHING AND HUNTING LICENSES, CONTRABAND, AND GUNS**

[11/01/11 Full IA Code text can be found at: [www.legis.iowa.gov/DOCS/ACO/IC/LINC/Chapter.483a.pdf](http://www.legis.iowa.gov/DOCS/ACO/IC/LINC/Chapter.483a.pdf)]

**483A.3 WILDLIFE HABITAT FEE.**

1. A resident or nonresident person required to have a hunting or fur harvester license shall not hunt or trap unless the person has paid the wildlife habitat fee. This section shall not apply to residents who have permanent disabilities or who are younger than sixteen or older than sixty-five years of age. Wildlife habitat fees shall be administered in the same manner as hunting and fur harvester licenses except all revenue derived from wildlife habitat fees shall be used within the state of Iowa for habitat development and shall be deposited in the state fish and game protection fund, except as provided in subsection 2. The revenue may be used for the matching of federal funds. The revenues and any matched federal funds shall be used for acquisition of land, leasing of land, or obtaining of easements from willing sellers for use as wildlife habitats. Notwithstanding the exemption provided by section 427.1, any land acquired with the revenues and matched federal funds shall be subject to the full consolidated levy of property taxes which shall be paid from those revenues. In addition the revenue may be used for the development and enhancement of wildlife lands and habitat areas. Not less than fifty percent of all revenue from wildlife habitat fees shall be used by the commission to enter into agreements with county conservation boards or other public agencies in order to carry out the purposes of this section. The state share of funding of those agreements provided by the revenue from wildlife habitat fees shall not exceed seventy-five percent.
2. Up to sixty percent of the revenues from wildlife habitat fees which are not required under subsection 1 to be used by the commission to enter into agreements with county conservation boards or other public agencies may be credited to the wildlife habitat bond fund as provided in section 483A.53.
3. Notwithstanding subsections 1 and 2, any increase in revenues received on or after July 1, 2007, pursuant to this section as a result of fee increases pursuant to 2007 Iowa Acts, ch. 194, shall be used by the commission only for the purpose of the game bird habitat development program as provided in section 483A.3B. The commission shall not reduce on an annual basis for these purposes the amount of other funds being expended as of July 1, 2007.

**483A.3A FISH HABITAT DEVELOPMENT FUNDING.**

Three dollars from each resident and nonresident annual and seven-day fishing license sold shall be deposited in the state fish and game protection fund and shall be used within this state for fish habitat development. Not less than fifty percent of this amount shall be used by the commission to enter into agreements with county conservation boards to carry out the purposes of this section.

**483A.3B GAME BIRD HABITAT DEVELOPMENT PROGRAMS**

1. *Allocation of revenue — accounts.* All revenue collected from increases in wildlife habitat fees as provided in section 483A.3, subsection 3, that is deposited in the state fish and game protection fund shall be allocated as follows:
  - a. Two dollars of each wildlife habitat fee collected shall be allocated to the game bird wetlands conservation account.
  - b. One dollar of each wildlife habitat fee collected shall be allocated to the game bird buffer strip assistance account.
  - c. Notwithstanding section 12C.7, subsection 2, interest or earnings on moneys collected from wildlife habitat fees that are deposited in each account created under this section shall be credited to that account. Notwithstanding section 8.33 or section 456A.17, moneys credited to each account created under this section shall not revert to the state general fund at the close of a fiscal year.
  - d. All revenue generated by increases in the wildlife habitat fee as provided in section 483A.3, subsection 3, shall be used as provided in this section, except for that part which is specified by the department for use in paying administrative expenses as provided in section 456A.17.
2. *Game bird wetlands conservation program.*

**IA FISH AND GAME PROTECTION FUND REPORT**  
**APPENDIX G - IA Code 483A, Fishing and Hunting Licenses, Contraband, and Guns**

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a. All moneys allocated to the game bird wetlands conservation account shall be used by the department only to carry out the purposes of the game bird wetlands conservation program and shall be used in addition to funds already being expended by the department each year for wetlands conservation purposes.

b. The purpose of the game bird wetlands conservation program is to create a sustained source of revenue to be used by the department to qualify for federal matching funds that are available for wetlands conservation and to undertake projects in conjunction with soil and water conservation districts, county conservation boards, and other partners that will aid in wetlands and associated habitat conservation in the state, including the acquisition, restoration, maintenance, or preservation of wetlands and associated habitat.

c. (1) All moneys that are allocated to the game bird wetlands conservation account shall accumulate in the account until the account balance is equal to one million dollars or an amount sufficient to be used by the department to qualify for federal matching funds. Each time the account balance reaches an amount sufficient to be used by the department to qualify for federal matching funds, the department shall apply for such matching funds, and upon obtaining such funds, shall expend the state and federal revenues available at that time to undertake projects as set forth in paragraph "b".

(2) Additional moneys that are generated by game bird wildlife habitat fees and allocated to the game bird wetlands conservation account shall again accumulate in the account, and each time the account balance is equal to one million dollars or an amount sufficient to be used by the department to qualify for federal matching funds, the department shall again apply for federal matching funds, and upon obtaining such funds, shall expend the state and federal revenues available at that time to undertake projects as set forth in paragraph "b".

d. The department shall use all state revenue and federal matching funds obtained under the federal North American Wetlands Conservation Act to undertake the purposes of the game bird wetlands conservation program as set forth in paragraph "b". State revenue allocated to the account shall be used by the department only for projects that increase public recreational hunting opportunities in the state and shall not be used for projects on private land that is not accessible to the public for recreational hunting.

**3. Game bird buffer strip assistance program.**

a. All moneys allocated to the game bird buffer strip assistance account shall be used by the department only to carry out the purposes of the game bird buffer strip assistance program and shall be used in addition to funds already being expended by the department each year for such purposes. The department shall not reduce the amount of other funds being expended for these purposes as of July 1, 2007.

b. The purpose of the game bird buffer strip assistance program is to increase landowner participation in federally funded conservation programs that benefit game birds and to increase opportunities for recreational hunting on private lands. To the extent possible, moneys allocated to the game bird buffer strip assistance account shall be used in conjunction with and to qualify for additional funding from private conservation organizations and other state and federal agencies to accomplish the purposes of the program. The funds may be used to provide private landowners with cost-sharing assistance for habitat improvement practices on projects that are not eligible for federal programs or where federal funding for such projects is not adequate. The department may utilize the funds to provide marketing and outreach efforts to landowners in order to maximize landowners' use of federal conservation programs. The department may coordinate such marketing and outreach efforts with soil and water conservation districts and other partners.

c. (1) All moneys that are allocated to the game bird buffer strip assistance account shall accumulate in the account for a period of three years. At the end of the three-year period, the moneys in the account shall be used by the department to carry out the purposes of the game bird buffer strip assistance program as set forth in paragraph "b". The department shall, by rule pursuant to chapter 17A, establish eligibility requirements for the program and procedures for applications for and approval of projects to be funded under the program. The department shall expend moneys from the account only for projects on private land that is accessible to the public for recreational hunting.

(2) Additional moneys that are generated by game bird wildlife habitat fees and allocated to the game bird buffer strip assistance account shall accumulate in the account and shall be used by the department every three years as set forth in subparagraph (1).

**IA FISH AND GAME PROTECTION FUND REPORT  
APPENDIX H - DNR Property Taxes Paid (2006-2011)**

**IA DNR Property Taxes Paid (2006-2011)**

County	Acres	Taxes Paid for FY11	Taxes Paid for FY10	Taxes Paid for FY09	Taxes Paid for FY08	Taxes Paid for FY07	Taxes Paid for FY06
Allamakee	5992	\$34,698	\$31,044	\$31,176	\$29,888	\$30,580	\$29,888
Appanoose	3156	\$25,830	\$25,388	\$24,834	\$23,456	\$23,760	\$18,010
Benton	335	\$958	\$926	\$928	\$868	\$826	\$1,462
Boone	164	\$1,780	\$1,686	\$1,478	\$1,390	\$790	\$780
Bremer	3184	\$13,988	\$14,662	\$13,176	\$12,202	\$13,550	\$11,548
Buchanan	248	\$930	\$910	\$772	\$762	\$818	\$824
Buena Vista	184	\$4,750	\$668	\$580	\$542	\$478	\$462
Butler	1415	\$27,878	\$26,132	\$23,900	\$22,306	\$21,591	\$17,978
Carroll	123	\$1,466	\$632	\$418	\$416	\$356	\$356
Cass	111	\$1,278	\$1,442	\$1,036	\$990	\$862	\$896
Cedar	56	\$934	\$880	\$814	\$788	\$890	\$814
Cerro Gordo	403	\$19,188	\$12,478	\$11,018	\$9,160	\$11,534	\$10,680
Cherokee	144	\$1,230	\$158	\$158	\$152	\$120	\$116
Clarke	60	\$100	\$98	\$84	\$82	\$78	\$78
Clay	2613	\$29,464	\$28,080	\$25,386	\$23,144	\$8,928	\$8,978
Clayton	771	\$4,212	\$4,098	\$4,254	\$5,484	\$5,092	\$3,732
Clinton	330	\$4,054	\$3,814	\$3,586	\$3,298	\$3,580	\$2,128
Dallas	415	\$5,306	\$5,304	\$4,154	\$3,777	\$2,562	\$2,512
Davis	844	\$6,858	\$6,724	\$6,796	\$6,866	\$6,028	\$6,052
Decatur	1950	\$9,408	\$8,870	\$8,052	\$7,512	\$7,122	\$6,730
Delaware	1099	\$3,783	\$3,012	\$818	\$740	\$632	\$1,074
Des Moines	184	\$3,996	\$3,958	\$3,378	\$3,160	\$2,716	\$2,772
Dickinson	4447	\$29,610	\$24,398	\$17,740	\$19,748	\$20,712	\$22,882
Dubuque	100	\$1,218	\$1,144	\$1,102	\$1,056	\$686	\$672
Emmet	2130	\$21,398	\$22,116	\$22,784	\$15,628	\$16,480	\$15,596
Fayette	479	\$3,988	\$3,850	\$3,712	\$3,242	\$842	\$824
Franklin	480	\$6,544	\$6,412	\$5,108	\$4,988	\$4,502	\$4,470
Fremont	2503	\$39,530	\$30,908	\$25,518	\$24,338	\$21,952	\$21,586
Greene	768	\$18,812	\$18,848	\$16,930	\$16,420	\$13,842	\$14,018
Guthrie	1629	\$16,282	\$15,660	\$11,812	\$9,910	\$9,082	\$9,104
Hamilton	1772	\$18,368	\$17,706	\$14,606	\$13,450	\$11,696	\$11,574
Hancock	1835	\$7,792	\$8,248	\$9,966	\$7,676	\$8,330	\$7,642
Hardin	52	\$1,664	\$1,656	\$1,500	\$178	\$164	\$148
Harrison	6433	\$60,694	\$60,030	\$51,782	\$49,102	\$44,060	\$42,922
Iowa	308	\$2,314	\$1,346	\$1,488	\$1,344	\$1,236	\$1,092
Jackson	451	\$4,554	\$4,250	\$4,474	\$4,052	\$4,530	\$4,596
Jasper	1723	\$10,556	\$10,466	\$13,136	\$9,478	\$8,034	\$8,362
Johnson	80	\$1,498	\$1,458	\$1,308	\$1,180	\$1,034	\$980
Jones	993	\$9,990	\$10,270	\$9,036	\$6,630	\$7,738	\$6,910
Keokuk	553	\$6,578	\$6,378	\$4,912	\$4,896	\$4,312	\$3,844
Kossuth	585	\$2,062	\$2,566	\$1,852	\$1,724	\$1,830	\$1,296
Lee	688	\$5,380	\$5,272	\$4,970	\$4,084	\$3,170	\$3,054

**IA FISH AND GAME PROTECTION FUND REPORT**  
**APPENDIX H - DNR Property Taxes Paid (2006-2011)**

Linn	729	\$5,360	\$5,952	\$4,884	\$4,636	\$3,662	\$3,592
Louisa	2030	\$17,102	\$15,168	\$12,694	\$12,716	\$12,608	\$6,250
Lucas	2964	\$23,400	\$19,408	\$18,634	\$17,728	\$17,296	\$16,762
Mahaska	370	\$4,760	\$4,794	\$3,748	\$3,532	\$3,510	\$3,436
Monona	1830	\$14,208	\$13,652	\$11,992	\$10,299	\$10,182	\$10,474
Monroe	1754	\$8,456	\$8,378	\$8,548	\$7,580	\$7,512	\$4,002
Muscatine	1391	\$13,246	\$12,450	\$11,704	\$10,930	\$10,384	\$10,216
O'Brien	1537	\$18,562	\$18,050	\$15,590	\$14,746	\$14,650	\$13,578
Palo Alto	1984	\$2,308	\$2,306	\$1,962	\$4,088	\$1,816	\$1,996
Plymouth	242	\$836	\$838	\$770	\$748	\$582	\$582
Pocahontas	80	\$880	\$824	\$804	\$772	\$720	\$692
Polk	194	\$4,750	\$4,356	\$4,378	\$4,266	\$3,612	\$3,458
Ringgold	3669	\$36,094	\$32,462	\$28,812	\$23,510	\$18,602	\$17,964
Sac	1388	\$13,898	\$14,974	\$14,322	\$16,118	\$12,212	\$12,194
Scott	380	\$2,500	\$2,370	\$2,238	\$2,116	\$2,046	\$2,046
Shelby	74	\$1,474					
Sioux	280	\$1,990	\$1,724	\$1,810	\$1,632	\$1,634	\$1,554
Story	412	\$5,542	\$3,894	\$3,106	\$2,854	\$2,160	\$2,138
Taylor	471	\$3,718	\$3,626	\$3,092	\$2,956	\$3,466	\$2,802
Union	367	\$4,128	\$1,756	\$3,572	\$1,396	\$1,278	\$1,218
Van Buren	1770	\$13,256	\$11,774	\$11,690	\$11,440	\$9,426	\$9,748
Wapello	1239	\$4,946	\$4,526	\$4,102	\$3,938	\$3,316	\$3,082
Warren	1106	\$244	\$236	\$206	\$200	\$194	\$182
Washington	285	\$3,926					
Wayne	80	\$876	\$842	\$708	\$668	\$678	\$656
Webster	3279	\$47,518	\$46,758	\$33,946	\$31,932	\$27,844	\$27,670
Winnebago	1657	\$3,224	\$3,546	\$3,850	\$2,718	\$2,280	\$1,906
Winneshiek	1119	\$13,548	\$13,078	\$11,458	\$9,818	\$9,468	\$7,588
Woodbury	1222	\$2,588	\$3,136	\$3,984	\$5,372	\$2,028	\$2,240
Worth	582	\$7,532	\$6,808	\$6,028	\$5,756	\$6,050	\$6,374
Wright	200	\$4,094	\$3,952	\$3,216	\$3,284	\$2,076	\$1,962
<b>Grand Total</b>	<b>86474</b>	<b>\$755,885</b>	<b>\$695,584</b>	<b>\$622,380</b>	<b>\$573,856</b>	<b>\$518,417</b>	<b>\$485,804</b>