

# *Three Mile Lake*



*A Conservation Milestone*

*Three Mile Lake:*

# *Forty Years in the Making*

**T**he water is clear and the setting of Three Mile Lake today is tranquil.

It wasn't always that way.

Three Mile Lake is a product of disaster—conceived by flood and born of drought. For more than 40 years, farmers in this Union County valley tried to tame the unpredictable and often ferocious waters of Three Mile Creek. Within the blink of an eye, crops, fences, bridges, portions of roadway and sometimes even livestock could be swept

away in rapidly rising waters.

People like Bob Harpin just laugh when asked

if flooding was an annual occurrence to those trying to farm along the banks of Three Mile Creek's.

"If we were lucky, Three Mile Creek would wash us out only once a year. Usually it was more often than that, sometimes five or six times a year," Harpin said.

Three Mile Creek was normally small enough to walk across, sometimes without even getting ankles wet. But when the rains came, the character of the stream could change in a hurry like in 1947 when it washed out the bridge on Bob Hardman's property and swelled to more than a quarter of a mile across.

Ironically, it was drought in the late 1980s that brought about the construction of the 880-acre Three Mile Lake. Federal funding to construct the lake three miles northwest of Afton in Union County was obtained to build the lake as a back-up water supply to nearby Twelve Mile Lake.

"A big structure like the lake today was never even considered back then," said Harpin.

"We never talked about recreational and economic benefits back then. We just wanted to control the flooding,"

said Lewis Ripperger, who sold the first 120-acres of what is now the bottom of Three



*Bob Hardman, Bob Harpin and Lewis Ripperger never thought that their efforts started over 40 years ago to control flooding in the Three Mile Creek Watershed would develop into the modern lake of today.*

Mile Lake.

Three Mile Lake was completed in 1995 and is now state-owned along with more than 2,000 surrounding acres of public land. It has become a recreational centerpiece, a place where people from all over the Midwest come to get away from it all.

But Ripperger and others remember when Three Mile Creek could deliver painful economic losses to area farmers at a moments notice.

Looking out over sparkling surface of Three Mile Lake, Ripperger can still point out where the 120-acres of land he once farmed is located.

"It probably isn't a whole lot wetter now than many of the years I farmed it," Ripperger said.

# *Saving a Lake Before It's Built*

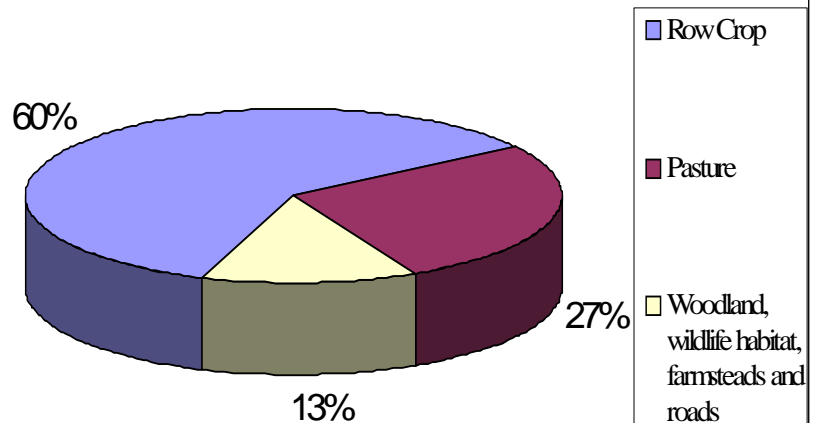
**T**hree Mile Lake was done backwards and will be better for it.

It's a sad fact that erosion has wreaked havoc with several lakes across Iowa. Some have lost as much as 50 percent of available storage capacity in just a decade or two.

Three Mile Lake represents a proactive approach to lake construction. Extensive work was done in the watershed prior to the lake being built so the effects of erosion have already been minimized.

Three Mile Lake has a 22,700 acre watershed stretching from northern Union County into southern Adair County. The efforts of watershed protection have resulted in 85 percent of the land being treated to tolerable soil erosion levels or below. Erosion control devices constructed within the watershed have included 18 ponds, 13 erosion control structures, 54 water

## **Three Mile Lake's Watershed**



control basins and more than 83,000 feet of terraces.

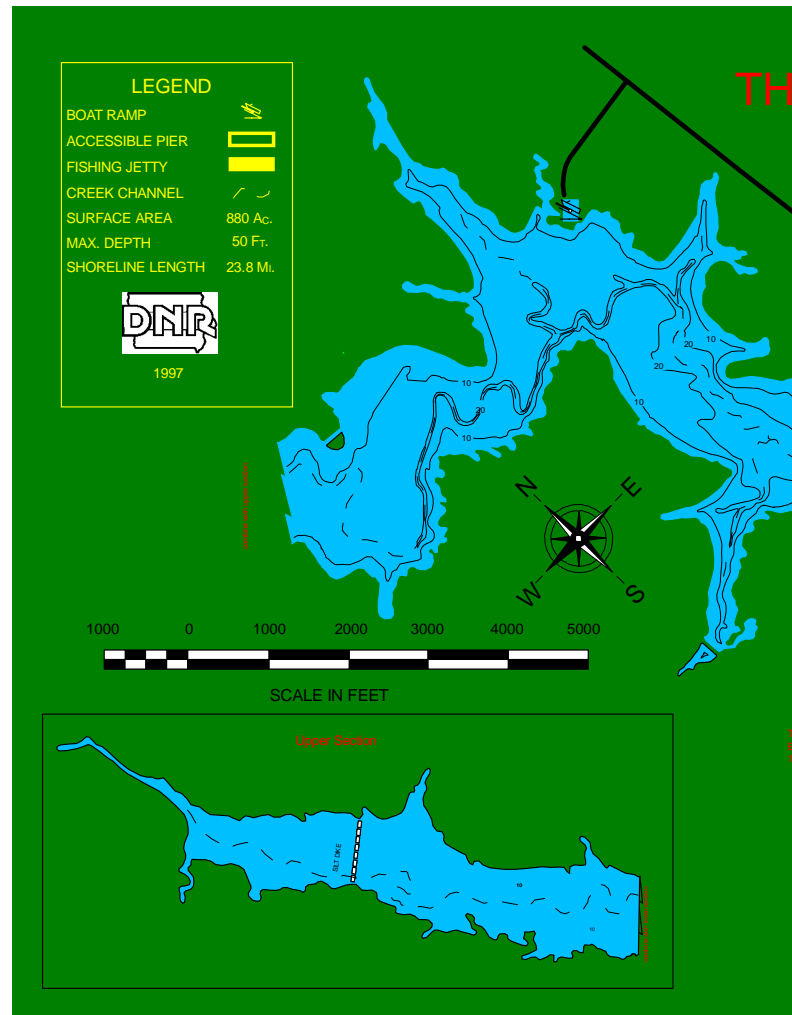
The project has not only demonstrated the effectiveness of using best management practices to control erosion, but also the economic benefits of farming in a more sustainable manner.

Soil Erosion Reduction for Selected Practices Installed 1991-98			
Practice	Units Installed	Acres Protected	Tons of soil saved annually
Pond	18	36	2,124
Erosion Control Structure	13	29	2,216
Water and sediment control basins	54	150	5,850
Terrace	83,436 feet	670	5,320
<b>Total</b>		<b>885</b>	<b>15,510</b>

# Best Management Practices: Protecting t

“Rotational grazing and no-till interseeding legumes into existing grass sod are two practices that have helped us increase pasture productivity dramatically. Legumes not only give our grass pasutres a nitrogen boost, they also improve forage quality and animal performances. Subdividing with electric fence allows us to move stock more frequently. Forages get plenty of time for rest and regrowth while erosion due to over-grazing is minimized.”

**Ron Brownlee, Orient**



“Virtually all the impoundments built in the watershed not only provide excellent flood and erosion control, but also livestock water, recreation and wildlife habitat.”

**Paul Goldsmith, NRCS, Creston**



“New high residu  
Combining these wee





**Jerry Neppel**  
**ISU Extension Coordinator**



## Ken Kline, Creston

# "People Come Here

John Tapken has come to memorize the telephone numbers of local motels.

"I had to," said Tapken, director of the Union County Conservation Board.

"Our cabins keep renting out so quickly that I have to be able to refer people somewhere," Tapken explains.

Three Mile Lake was constructed with the idea of providing an economic boost in the form of tourism in addition to providing a source of drinking water to residents of southern Iowa.

The very earliest numbers would signal success. In just its first year of operation, camping revenue from the Union County operated campground has grossed the county \$60,000 in revenue, double the \$30,000 lost from the property tax rolls due to land acquisition from the lake.

In fact, a night's stay in one of the eight cabins owned by Union County at Three Mile Lake has become one tough ticket to get.

"The cabins are just as busy in January as in July because the ice fishing is so good," Tapken said.

Throw in outstanding waterfowl hunting, some first-class turkey hunting

and diversified upland game hunting and the ingredients are all there for year-round no-vacancy signs on



the simple, one-room log cabins.

Tapken said he has been amazed at Three Mile Lake's ability to draw from substantial distances.

"We've had campers who have been going to Minnesota for 15 years who cancelled their reservations there after being here. People are coming here because the water's cleaner," Tapken said.

Tapken said Three Mile Lake is a substantial draw for anglers from surrounding states like Missouri, Illinois and particularly Nebraska. Meanwhile, he has had cabins reserved by hunters from places like Michigan and Arkansas. He's even had inquiries from as far away

*Supply can't keep up with demand when it comes to the eight cabin rentals owned by Union County. The cabins are heavily used throughout the entire year*



# *Because the Water is Cleaner”*



as New Jersey.

DNR Wildlife Biologist Mel Moe said rabbit hunters from states like Illinois, Kentucky and Tennessee have come to Three Mile Lake to run beagles.

Moe said the more than 2,200 acres of public area surrounding the lake is com-

prised of one-third woodlands and two-thirds prairie.

Three Mile's diverse upland habitat attracts more than hunters and game species, according to Moe.

"We have some nice prairie areas that we hope to make even better. The praries areas already attract a variety of non-game species including the somewhat rare Henslow sparrow and upland sandpipers," Moe said.

DNR Fisheries Biologist Mike McGhee is anticipating an extended honeymoon of good fishing for anglers.

While new lakes like Three Mile are often hotspots for a time after being constructed, action eventually fades. Because of the efforts made to protect the watershed and design the lake, McGhee is expecting Three Mile to remain a

top quality fishing lake much longer than many other newly constructed lakes.

Three Mile Lake is one of the first lakes in Iowa where a major effort was made to develop underwater fish structures and habitat prior to being filled.

"When the lake is dry, you have the opportunity to do things you ordinarily wouldn't have a chance to do. That's exactly what we did on Three Mile and with all the

structure that is there, I look for it to get better and better in upcoming years," McGhee said.

McGhee said the effort within the watershed to reduce reduce erosion will also pay important dividends in maintaining a top-notch fishery.

"Farmers in this watershed have made the extra effort on soil conservation. That means Three Mile is going to have more consistently good water which means better growth rate for fish and better oppor-

tunities for anglers," McGhee said.



*Bass like this are attracting anglers from all over the Midwest including Trevor Wood of Britt (left) and his cousin Brad Wood of Woden.*



# A Quality Water Supply

About the time anglers began anticipating the first hot fishing of the spring, Three Mile Lake began being used for its real purpose—providing a safe, reliable drinking supply to southern Iowa residents.

Drinking water was drawn from Three Mile Lake for the first time on April 1, 1999 and it is an important supply in conjunction with nearby Twelve Mile Lake. Between the two lakes, the Southern Iowa Rural Water Association delivers over 950 million gallons of safe drinking water annually to approximately 25,000 residents in seven southern Iowa counties.

The efforts of farmers to protect the watershed of the lakes is key to protecting the supply of drinking water, according to Steve Green, water superintendent for Creston.

The combination of having clean water coming into the plant and state-of-the-art equipment to treat it once it gets there means residents in southern Iowa are consistently delivered some of the highest quality drinking water in the state, Green



said.

“We have a generation of farmers now that are increasingly aware of the pollution potential their farming practices generate. If there ever was a time when

producers believed one pound of fertilizer or pesticides was good and two was better, that time is past. It’s expensive and too many people inside and out of agriculture are concerned about the environment,” Green said.

Using less agricultural chemicals also produces economic savings beyond the farm gate.

“The cleaner the water is coming into the plant, the less cost there is for treating it,” Green said.

## *The Three Mile Watershed Pollution Prevention Project has been a joint effort of:*

- Adair County Soil and Water Conservation District
- Union County Soil and Water Conservation District
- Three Mile Reservoir Agency
- Three Mile Water Quality Project Advisory Council
- Union County Conservation Board
- Southern Iowa Graziers (and other livestock producer groups)
- The Iowa Department of Natural Resources
- Iowa State University Extension
- Iowa Department of Agriculture and Land Stewardship
- Natural Resources Conservation Service (NRCS)
- Farm Service Agency (FSA)

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