

Use Attainability Analysis

1 Water Body Name	Packard Creek
2 Segment Description	Mouth to confluence with unnamed tributary
3 Segment Length (mi)	4.9
4 Drainage Area (sq. mi.)	13.7
5 Segment Start Latitude, Longitude (DD)	40.60285, -92.71974
6 Segment End Latitude, Longitude (DD)	40.63712, -92.76709
7 Route of Flow (Next Downstream Adopted Designated Use)	Packard Creek (A1, proposed, BWW2, existing) to Chariton River (A1, BWW1, HH)
8 NPDES Facility and Permit Number (if Applicable)	N/A - Field work was collected when reviewing the route of flow for Exline STP (0426001).
9 Sample Site ID(s)	1230-4
10 Segment County Name(s)	Appanoose
11 Field Work Date(s)	9/29/2015

12 Aquatic Life Use Attainability Analysis - Conclusion

Recommended Highest Attainable Use: Aquatic Life Use	N/A
This segment currently has a designation of BWW2. A lack of age ranges and diversity of game fish species indicates a non-reproducing population (see Supplemental Data). A BWW1 designation requires multiple species and age ranges to be viable. Therefore, the highest attainable aquatic life use for this stream segment is BWW2.	

13 Recreational Use Attainability Analysis - Conclusion

Recommended Highest Attainable Use: Recreational Use	A1
40 CFR 131.10(g)(2) (Flow)	Water levels and flow are sufficient to support full body immersion (see Site Observations Table). Therefore, the highest attainable recreational use for this stream segment is A1.

14 Flow

Field Work Date	Description
9/29/2015	USGS stream gage data for the area indicated stream flows were normal at the time of assessment.

Use Attainability Analysis - Data

Site Observations

Use	Site parameter	Site ID #1230-4
AL/R	15 Latitude, Longitude (DD)	40.63196, -92.75522
AL/R	16 Average Depth (in)	20.5
AL/R	17 Maximum Depth (in)	>39
AL/R	18 Stream Width (ft)	24
AL/R	19 Pools Observed?	Yes
AL only	20 Non-Game Fish Present and Counts (Species: Number)	Not sampled
	21 Game Fish Present and Counts (Species (Size Range): Number)	Not sampled
	22 Stream Habitat (See also: #29 Site Photos)	Sampling crew indicates a beaver dam downstream has water backed up and no flow present.

Use	Site parameter	Site ID #1230-4
R only	23 Evidence of Use for Primary Contact Recreation? (Yes*/No)	No
	24 Evidence of Use by Children? (Yes*/No)	No
	25 Evidence of Use for Secondary Contact Recreation? (Yes*/No)	No
AL/R	26 Additional Description	Roughly half of the segment is within the Sedan Bottoms Wildlife Management Area.

AL = Aquatic Life

R = Recreation

*If yes, elaborate.

27 Supplemental Data

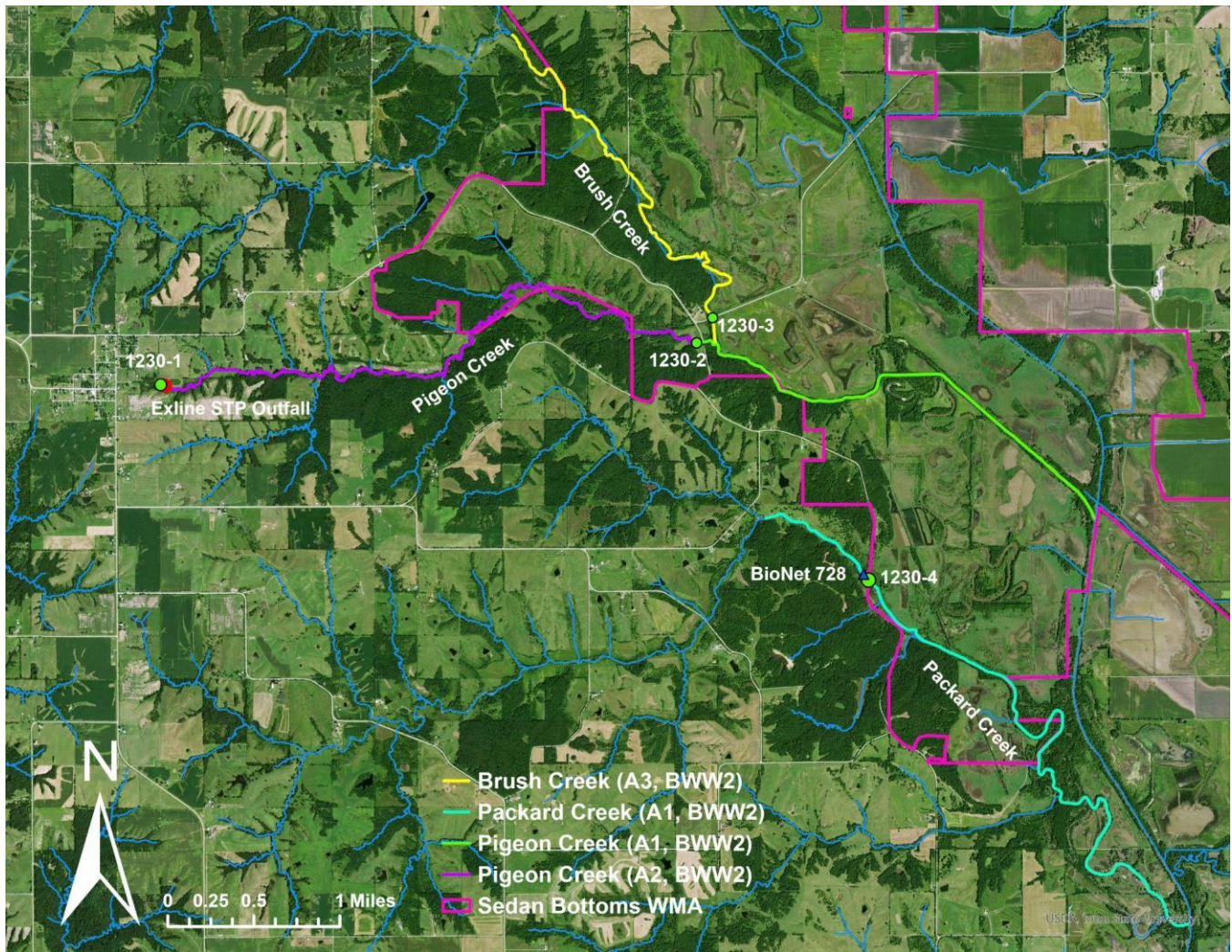
Use	Site parameter	BioNet Site ID #728
AL/R	Latitude, Longitude (DD)	40.63237, -92.75576
AL/R	Field Work Date	9/15/2015
AL/R	Average Depth (in)	4.2
AL/R	Maximum Depth (in)	27.6
AL/R	Pools Observed?	Yes
AL only	Non-Game Fish Present and Counts (Species: Number)	Bigmouth shiner: 45 Bluntnose minnow: 2 Brassy minnow: 3 Central stoneroller: 4 Creek chub: 65 Fathead minnow: 3 Green sunfish: 593 Johnny darter: 7 Orangespotted sunfish: 4 Red shiner: 17 Sand shiner: 6
	Game Fish Present and Counts (Species (Size Range): Number)	Bluegill (1-3"): 4 Hybrid Green Sunfish x Bluegill: 1
AL/R	Additional Description	https://programs.iowadnr.gov/bionet/Sites/728

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Desktop review verified that the UAA field work is still valid.

28 Map of Segment, Outfall, and Site(s)



29 Site Photos



Figure 1. 1230-4 Recreational use assessment midpoint looking upstream.



Figure 2. 1230-4 Recreational use assessment midpoint looking downstream.



Figure 3. 1230-4 Recreational use assessment upstream looking upstream.



Figure 4. 1230-4 Recreational use assessment upstream looking downstream.



Figure 5. 1230-4 Recreational use assessment downstream looking upstream.



Figure 6. 1230-4 Recreational use assessment downstream looking downstream.