

## **Frequently asked questions about environmental considerations, permits, and clearances**

**Issued: Nov. 13, 2012**

**Updated: Dec. 23, 2013**

The following provides a summary of each type of permit, a description of the purpose of the permit, the regulatory agency responsible for the permit, and the Iowa Department of Transportation's office responsible for obtaining the permit for Iowa DOT administered projects. For projects administered by a local agency, the local agency is responsible for obtaining the permit. In general, permits and clearances pertain to essential work within highway rights-of-way.

**404 permit (nationwide, regional, and individual):** A permit to authorize placement of fill materials into waters of the United States, as required by the Clean Water Act. Nationwide, regional, and individual 404 permits are defined in chapter 10 of the Iowa DOT's Construction Manual. The regulatory agencies for 404 permits are the U.S. Army Corps of Engineers and the Iowa Department of Natural Resources. The Iowa DOT's Office of Location and Environment is responsible for obtaining the permit for Iowa DOT administered projects.

**401 certification:** This certification is incorporated with 404 permits. The purpose is to certify that a proposed project will not harm the state's water quality. The regulatory agency is the Iowa DNR. The Iowa DOT's Office of Location and Environment is responsible for obtaining this certification for Iowa DOT administered projects.

**408 permit (major and minor):** The permit requires that any proposed alteration/modification to an existing Corps project (i.e., levee, flood-risk reduction project) must be authorized by the secretary of the Army. In June 2010, the Corps issued a memo stating that Section 408 would now be the sole authority utilized for approvals to modify Corps projects. The Corps subsequently created two levels of review under Section 408; Major 408 and Minor 408. Major 408 reviews are for projects that involve a modification of the physical characteristics or the hydraulic capacity of the levee. Minor 408 reviews are for projects that either result in temporary impacts to levees or are within the critical area of the levee, but do not permanently change the physical characteristics or hydraulic conditions of the levee. Major 408 reviews may take 12 to 18 months and require Corps' district, division, and headquarters involvement, whereas minor 408 review usually takes about 30 days and can be approved at the Corps' district level.

**NOTE:** If you are working on a project that may impact a navigable river (i.e., Mississippi, Missouri, or Des Moines) or a federal flood-risk reduction project, there may be Section 408 issues, the most notable being that the Corps cannot issue a 404 permit until they have Section 408 approval.

The regulatory agency is the Corps and local sponsor. The Iowa DOT's Office of Bridges and Structures is responsible for obtaining this certification for Iowa DOT administered projects.

**Flood plain permits:** Iowa DNR flood plain development permits are required for bridge projects over streams that drain over 100 square miles in a rural area or for projects where the stream drains over 2 square miles in an urban area. A flood plain permit is required to ensure the Iowa DNR's backwater and freeboard criteria are met for the design of the structure. The regulatory agency is the Iowa DNR via the Federal Emergency Management Agency. The Iowa DOT's Office of Bridges and Structures' preliminary bridge section is responsible for obtaining the permit for Iowa DOT administered projects.

**Sovereign lands permits:** Iowa DNR's sovereign lands construction permits are required on Iowa DNR controlled lands, including bridge projects over "meandered sovereign rivers." The Iowa DNR claims ownership of the streambed and banks of 10 major rivers in Iowa, including the Mississippi and Missouri rivers. The permit is required to ensure threatened or endangered plants or animals are not impacted and public lands are protected. The Iowa DNR will review available information and issue a permit if the public's interest is maintained for these lands and waters. Maps and lists of Iowa's sovereign rivers and lakes are attached. The regulatory agency is the Iowa DNR. The Iowa DOT's Office of Bridges and Structures' preliminary bridge section is responsible for obtaining the permit for Iowa DOT administered projects.

**Stormwater permits:** There are two categories of stormwater permits that are explained in the following section – general permit #2 and general permit #3.

**NOTE:** If a site is in an outstanding Iowa waters (OIW) watershed, the project cannot obtain coverage under a general permit. Rather, an individual permit is obtained from the Iowa DNR. A map of OIW watersheds and a list of OIWs are attached.

### **General permit #2**

What is it? Projects that disturb greater than 1 acre require coverage under Iowa DNR's National Pollutant Discharge Elimination System general permit #2 for stormwater discharges associated with construction activities.

How is it obtained? The contracting authority will obtain permit coverage by submitting a Notice of Intent (NOI) to the Iowa DNR. The prime contractor is required to complete a co-permittee certification statement (form 830215) and return with the signed contract. The prime contractor is also required to obtain co-permittee certification statements from affected subcontractors.

For contractor furnished borrow or waste sites that disturb greater than 1 acre, the prime contractor is responsible to obtain permit coverage.

What are the requirements? Refer to Pollution Prevention Plan in the plans. Refer to Section 2602 in the **Standard** Specifications.

The regulatory agency is the Iowa DNR. The Iowa DOT's Office of **Construction** is responsible for obtaining the permit for Iowa DOT administered projects.

### General permit #3

What is it? The Iowa DNR's National Pollutant Discharge Elimination System general permit #3 is the stormwater discharge permit required for asphalt plants, concrete batch plants, quarries, sand and gravel pits, and rock crushers. This permit applies to portable and stationary plants. There are no acreage requirements that apply to plant sites.

How is it obtained? The contractor will be responsible to obtain stormwater permits for their activities on or off of the project by submitting a Notice of Intent (NOI) to the Iowa DNR. For example: If a contractor sets a portable plant "on" or "off" Iowa DOT right-of-way, the contractor is responsible for obtaining coverage for the site under general permit #3.

What are the requirements? Refer to general permit #3 on the Iowa DNR's website. The regulatory agency is the Iowa DNR.

**Coast Guard permits:** A U.S. Coast Guard permit is required for any bridge replacement projects over the Mississippi and Missouri rivers. The permit is required to ensure the project will not significantly impact navigation on the river. The Coast Guard also issues permits for other activities that could affect navigation, such as dredging, mooring cells, and dolphins. The regulatory agency is the Coast Guard. The Iowa DOT's Office of Bridges and Structures' preliminary bridge section is responsible for obtaining the permit for Iowa DOT administered projects.

**Threatened and endangered species:** Construction of transportation projects cannot harm threatened or endangered species. Examples include Indiana bats and Topeka shiners. Information regarding Indiana bats, a map of their habitat locations, and related requirements is provided in the Iowa DOT's Construction Manual, chapter 6. A map of Topeka shiner critical habitat in Iowa is attached. The regulatory agencies are the Federal Highway Administration, U.S. Fish and Wildlife Service, and the Iowa DNR. The Iowa DOT's Office of Location and Environment is responsible for obtaining this clearance for Iowa DOT administered projects.

**Section 106 of the National Historic Preservation Act:** Construction projects cannot impact archeological or historical resources without review and concurrence by regulatory agencies. The regulatory agencies are the Federal Highway Administration, the Iowa State Historic Preservation Officer, and the Office of the State Archaeologist. The Iowa DOT's Office of Location and Environment is responsible for obtaining this clearance for Iowa DOT administered projects with federal funding.

**NEPA (National Environmental Policy Act):** The Act established a process for environmental review of proposed transportation projects. NEPA requires approval from the Federal Highway Administration. NEPA documents may contain construction-related requirements. The regulatory agency is the Federal Highway Administration. The Iowa DOT's Office of Location and Environment is responsible for obtaining this clearance for Iowa DOT administered projects with federal funding.

**Migratory Birds Treaty Act:** Construction of transportation projects cannot harm migratory birds, including active nests of migratory birds. The regulatory agency is U.S. Fish and Wildlife Service. Contractors are responsible to ensure their actions do not harm migratory birds, including their active nests.

**Standard Plan Notes, General Specifications, Developmental Specifications, Standard Road Plans, Road Design Details, and Office of Contracts' Proposal Notes.**

**The following are Iowa DOT documents commonly associated with permits and environmental requirements.**

**Standard Notes for Plans**

**232-3C (Native Grass Seeding):** Specifies that "following the completion of work in a disturbed area, place seed and mulch on the disturbed area lying 8 feet or more beyond the shoulder" with a native seed mix that includes big bluestem, Indian grass, little bluestem, partridge pea, sideoats grama, Canada wild rye, switchgrass, and oats.

**232-9 (Indiana Bat):** Cut down all trees included in the clearing and grubbing after Sept. 15 and before April 15. Iowa DOT's Construction Manual, chapter 6, appendix 6-1(c) provides a map of the State of Iowa with the range of potential Indiana bat habitat.

**281-1 (Section 404 Permit and Conditions):** Construct this project according to the requirements of Corps \_\_\_\_\_, permit no. \_\_\_\_\_. A copy of this permit is available from the Iowa DOT's Office of Contracts upon request. Iowa DOT personnel can obtain a copy from the Office of Location and Environment. The Corps reserves the right to visit the site without prior notice.

**281-6 (Topeka Shiner Watersheds):** Includes special conditions (BMPs) for working in Topeka shiner watersheds.

**282-1 (Restricted Stream Access):** A low-water crossing for the contractor's convenience is not allowed on this project. Streambank disturbance and access to "name of creek, stream, or river" is not allowed unless specifically designated in the plans. No other access will be allowed.

**NOTE:** The project designer will review methods of access for constructability and address in the plans as needed.

**282-2 (Dredging):** Dredging to obtain materials from the stream is not allowed on this project due to \*fill in environmental/water quality/etc. constraints\*.

**NOTE:** When this plan standard note is used and dredging is not allowed, the reason(s) dredging is not allowed will be stated within the asterisks.

### **General Specifications**

**1105.14 (Protection of Water Quality and Wetlands):** Companion to Standard Note 281-1, specifies that the contractor shall comply with the requirements of the Clean Water Act (33 U.S.C. 1344 and 33 CFR 323) and Executive Order 11990, and provides a list of Section 404/401 Permit General Conditions.

**1106.07 (Contractor Furnished Borrow and Waste Areas):** Specifies that contractor shall obtain necessary clearances and permits, and that it is contractor's responsibility to ensure the areas selected for waste or disposal of excess material (excavated material or broken concrete), or furnished borrow have been reviewed for impacts to the following.

- Culturally sensitive sites or graves
- Wetlands or "Waters of the U.S.", including streambanks below the "ordinary high-water mark," without an approved Corps' of Engineers Section 404 permit
- Threatened or endangered species
- Flood plains
- Sovereign lands
- Stormwater discharge

**2102.03, J (Archaeological Salvage):** Specifies that contractor shall temporarily discontinue operations at sites whenever remains of prehistoric people's dwelling sites, burial sites, or artifacts of historical or archaeological significance are encountered. The engineer, in conjunction with proper archaeological authorities of the State of Iowa, will promptly examine the exposure and determine the disposition.

**2418 (Temporary Stream Diversion):** Companion to Standard Road Plan EW-402, provides information on the construction, maintenance, and removal of temporary stream diversion measures. Temporary stream diversion involves diverting flow of a perennial stream around the construction site by use of a diversion channel, pipe, or hose. Temporary stream diversion applies to projects involving installation of reinforced box culverts 6 feet by 6 feet (1800 mm by 1800 mm) or larger, precast box culverts 6 feet by 6 feet (1800 mm by 1800 mm) or larger, or arch pipe culverts 102 inches by 62 inches (2590 mm by 1575 mm) or larger.

**2547 (Temporary Stream Access):** Companion to Standard Road Plan RL-16. This provides information on the construction, use, maintenance, and removal of temporary structures used to provide construction access across, along, or into waters of the United States. This is authorized by 404/401 permits.

**2538.03 (Salvage, Removal, and Disposal):** Specifies that removal of buildings and materials must be done in accordance with federal, state, and local regulations, and requires all demolition materials that are not being recycled or salvaged must be taken directly to a landfill approved by the Iowa DNR (or equivalent environmental department in a surrounding state) to accept construction and demolition wastes.

#### **Developmental Specifications**

**DS-12028 (Floating Silt Curtain):** Developmental Specification for installation of floating silt curtain (hanging) for sediment control in water. Typically, floating silt curtain (containment) is a bid item when specified by the Iowa DOT's Office of Location and Environment.

#### **Standard Road Plans**

**EW-401 (Temporary Stream Crossing, Causeway, or Equipment Pad):** Detail sheet for temporary stream crossing, causeway, or equipment pad.

**EW-402 (Temporary Stream Diversion):** Detail for temporary stream diversion types.

**EC-201 (Silt Fence):** Detail sheet for installation of silt fence for erosion control.

**EC-202 (Floating Silt Curtain):** Detail sheet for installation of floating silt curtain for erosion control in water.

#### **Road Design Details**

**510-3 (Supplemental Details of Field Fence Construction – Small Animal Barrier):** Detail sheet for small animal barrier fence.

**510-5 (Small Animal Barrier for Gated Entrance):** Detail sheet for small animal barrier fence mounted on an entrance gate.

**4404 (Rock Splash Basin):** Detail sheet for rock splash basin at culvert outlet.

**Office of Contracts' Proposal Notes (The Office of Contracts inserts these items into all contracts.)**

**005.0012 (Active Nests of Migratory Birds):** Specifies that in order to protect migratory birds, contractor cannot conduct construction activities where active nests are present between the dates of April 1 and July 15, inclusive or until the birds have fledged and left the nest.

### Common questions

**Q: Contractors need to know if something has been requested and denied relative to the permit. Can this information be provided in the contract?**

*A: If a contractor has a question whether something had been pursued and denied, they need to post the question on BIDX.*

**Q: What can a contractor do postletting relative to permit approvals?**

*A: Contractors must bid projects based on all the contract documents. If the contract documents (i.e., permits) do not state something is approved, the contractor can pursue a request to the regulatory agency for their own additional approvals (refer to Iowa Department of Transportation's General Specifications 1105.14 Protection of Water Quality and Wetlands).*

**Q: If a contractor gets postletting permit approval after award and signing of the contract, would it mandate that it be a value engineering proposal?**

*A: Any permit approvals obtained by the contractor postletting, after award of contract and signing, would not be subject to value engineering, as long as it does not involve a change to the plans. The postletting permit approvals must be confirmed in writing from the regulatory agency and will be accepted by the Iowa Department of Transportation.*

**Q: Can the Iowa Department of Transportation permit multiple methods of temporary stream access and clearly identify/define in the contract documents?**

*A: It is not possible for the Iowa DOT to submit all the potential methods for permit approval because this is dependent on the contractor's means and methods. The Iowa DOT will ensure that there is at least one method that can be used to ensure the work is constructible.*

**Q: Would it be beneficial to detail out temporary stream access in the permit?**

*A: Temporary stream access is detailed in Standard Road Plan RL-16.*

**Q: What is ordinary high-water mark?**

*A: The term ordinary high-water mark means a point on a streambank or shoreline at which the presence and action of surface water is so continuous as to leave a distinct mark below which vegetation and soil is noticeably different from the top of the streambank or shoreline. This mark is*

typically recognized by the presence of a clear line below which vegetation cannot grow due to the presence of surface water, but can also be identified by other physical characteristics within the stream channel, including the presence of litter and woody debris (e.g., corn stubble, leaves, tree branches and/or limbs), or erosional features, such as shelving, scour holes, and sediment.

Sandbars and vegetation bars within the stream channel are generally considered to be below the ordinary high-water mark.

**Q: Could clearances for a project be listed in the contract documents?**

**A:** Not at this time, but this will be further reviewed for consideration in the future.

**Q: Can a list of all approved permits and documents be provided for each project?**

**A:** Not at this time, but this will be further reviewed for consideration in the future.

**Q: Can prebid communication be improved?**

**A:** For some projects the Iowa Department of Transportation will hold possible constructability meetings and/or prebid meetings for discussion of the project and to receive input from the construction industry.

**Q: Could copies of the permits be put on BIDX?**

**A:** Not at this time, but this will be further reviewed for consideration in the future.

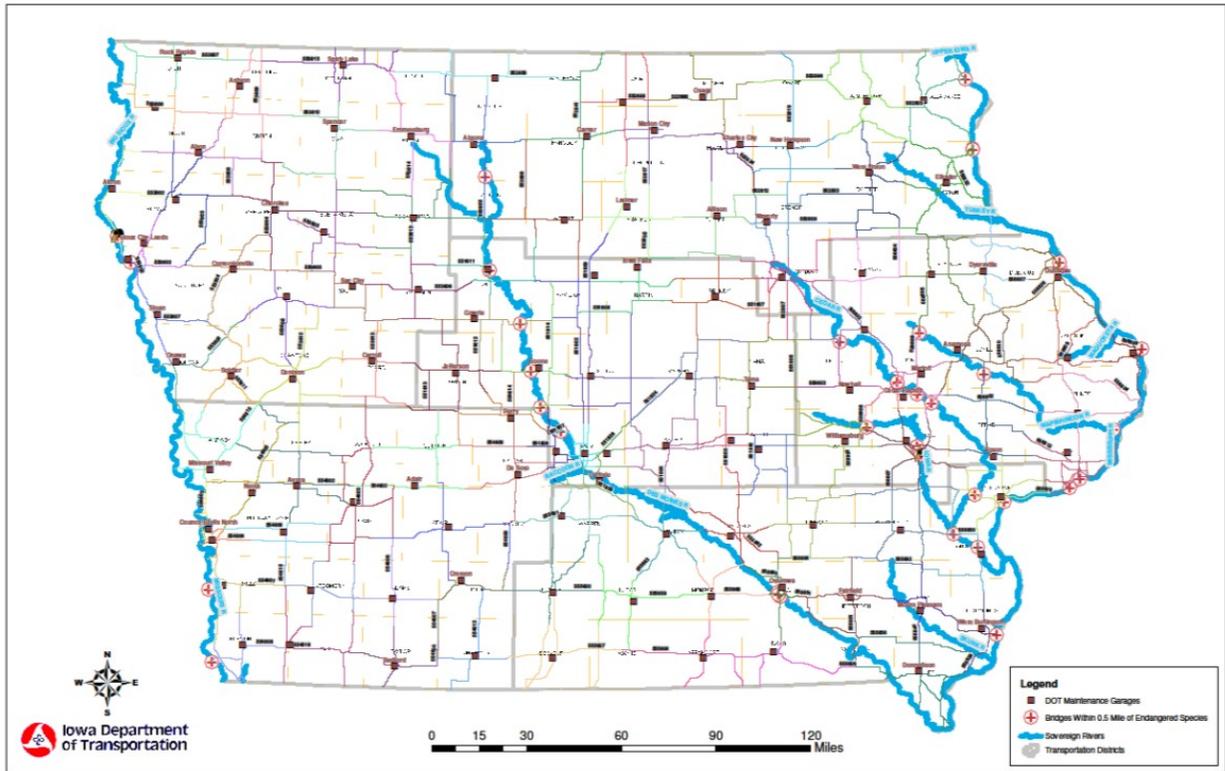
**Q: Can dredging be approved ahead of time?**

**A:** If Iowa Department of Transportation determines that dredging is essential to construct the project, then the Iowa DOT will pursue approval of dredging in the 404 permit application. This typically includes dredging inside cofferdams, barge slips, removal of sand bars to improve water flow, etc.

If the Iowa DOT determines that dredging in the project area is not allowed, due to environmental or other concerns, then the Iowa DOT will include a Standard Note 282-2 in the plans clearly stating that dredging of any type is not allowed and the reason why.

When not specifically disallowed by the Iowa DOT, contractors may elect to pursue their own approvals for the use of dredged materials, provided those approvals are in accordance with Articles 1105.14 and 1106.07 and there are no environmental concerns. Elective items typically include the use of dredged materials for causeways constructed according to Standard Road Plan RL-16, work pads, etc. The Iowa DOT will inform contractors of relevant information about stream conditions as much as possible based on specific questions provided via BIDX. Please note that Iowa DOT obtains approval for temporary structures constructed according to Standard Road Plan RL-16, but not for the source of materials used within those structures.

In general, 404 permits require that materials excavated/dredged from the stream be removed to upland, nonwetland locations when no longer necessary for construction of the project.



**Map of Iowa's Sovereign Rivers**

"Meandered sovereign rivers" means those rivers which, at the time of the original federal government surveys, were surveyed as navigable and important water bodies and were transferred to the states upon their admission to the union to be transferred or retained by the public in accordance with the laws of the respective states upon their admission to the union. The State of Iowa holds sovereign title in trust for the benefit of the public to the beds of the following rivers.

**River and description**

The Mississippi River from the south boundary of the state of Minnesota to the north boundary of the state of Missouri.

The Missouri River from the south boundary of the state of South Dakota to the north boundary of the state of Missouri.

The Big Sioux River from the south boundary of the state of Minnesota to the south boundary of the state of South Dakota.

The Des Moines River from the Mississippi River to the west line of Section 7, Township 89 North, Range 32 West, Palo Alto County (west branch) and to the north line of Section 2, Township 95 North, Range 29 North, Kossuth County (east branch).

The Cedar River from the Iowa River to the west line of Section 7, Township 89 North, Range 13 West, Black Hawk County.

The Iowa River from the Mississippi River to the west line of Section 7, Township 81 North, Range 11 West, Iowa County.

The Little Maquoketa River from the Mississippi River to the west line of Section 35, Township 90 North, Range 2 East, Dubuque County.

The Maquoketa River from the Mississippi River to the west line of Section 18, Township 84 North, Range 3 East, Jackson County.

The Nishnabotna River from the north boundary of the state of Missouri to the north line of Section 1, Township 67 North, Range 42 West, Fremont County.

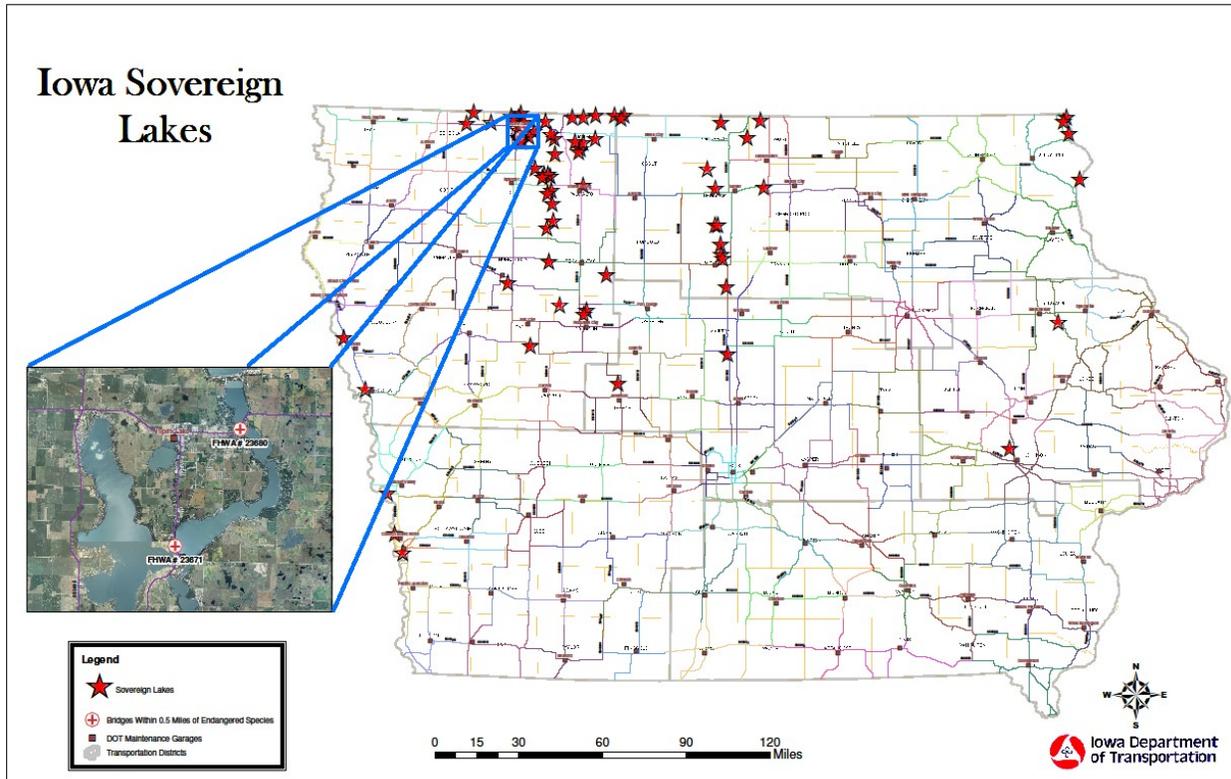
The Raccoon River from the Des Moines River to the west line of Section 30, Township 78 North, Range 25 West, Polk County.

The Skunk River from the Mississippi River to the north line of Section 1, Township 73 North, Range 8 West, Jefferson County.

The Turkey River from the Mississippi River to the west line of Section 30, Township 95 North, Range 7 West, Fayette County.

The Upper Iowa River from the Mississippi River to the west line of Section 28, Township 100 North, Range 4 West, Allamakee County.

The Wapsipinicon River from the Mississippi River to the west line of Section 19, Township 86 North, Range 6 West, Linn County.



**Map of Iowa's Sovereign Lakes**

"Meandered sovereign lakes" means those lakes which, at the time of the original federal government surveys, were surveyed as navigable and important water bodies and were transferred to the states upon their admission to the union to be transferred or retained by the public in accordance with the laws of the respective states. The state of Iowa holds sovereign title in trust for the benefit of the public to the beds of the following lakes.

<u>County</u>	<u>Lake</u>
Allamakee	Kains
Lansing	Big Lake
	Mud Hen
	New Albin Big Lake
Buena Vista	Pickeral
	Storm

**County**

**Lake**

Calhoun

North Twin

South Twin

Tow Head

Cerro Gordo

Clear

Clay

Dan Green Slough

Elk Mud

Pickeral

Round

Trumbull

Delaware

Silver

Dickinson

Center

Diamond

East Okoboji

Hottes

Jemerson Slough

Little Spirit

Lower Gar

Marble

Minnewashta

Pleasant

Prairie

Silver

**County**

**Lake**

	Spirit Swan
	Upper Gar
	Welch
	West Okoboji
Emmet	Birge
	Cheerers
	East Swan
	Four Mile
	Grass
	High
	Ingham
	Iowa
	Ryan
	Tuttle
	Twelve Mile
	West Swan
Greene	Goose
Hamilton	Little Wall
Hancock	Crystal
	Eagle
	East Twin
	West Twin
Harrison	Nobles

**County**

**Lake**

Kossuth

Burt

Goose

Monona

Blue

Osceola

Iowa

Rush

Palo Alto

Five Island

Lost Island

Rush

Silver

Virgin

Pocahontas

Clear

Lizard

Pottawattamie

Carter

Manawa

Sac

Black Hawk

Winnebago

Harmon

Rice

Woodbury

Browns

Worth

Silver

Wright

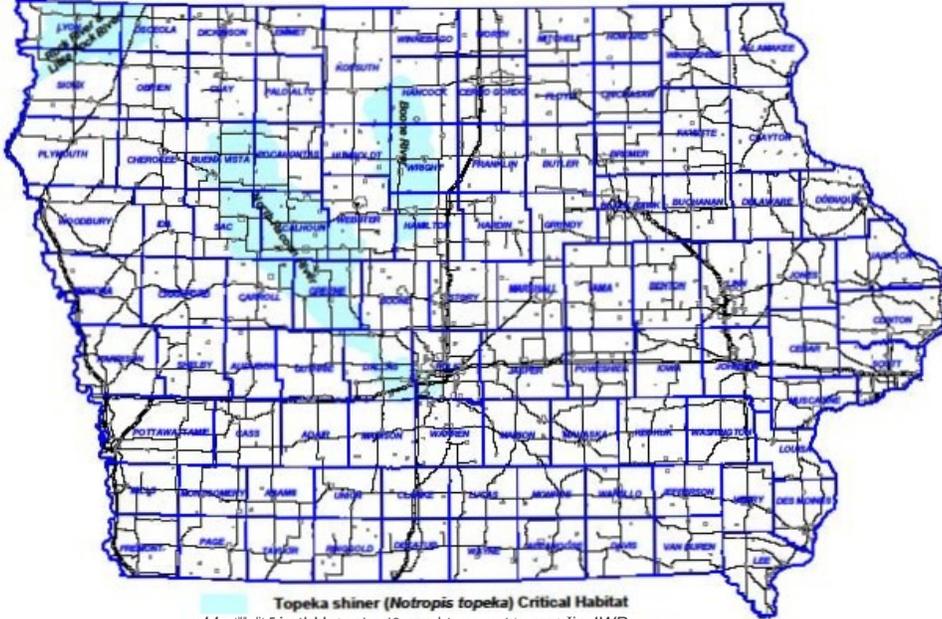
Big Wall

Cornelia

Elm

Morse

*Watersheds Where Topeka Shiner  
Best Management Practices Can Be Expected*



**Topeka shiner (*Notropis topeka*) Critical Habitat**  
 «Hprtl'mit.5 in thHwtshed& can bt- expect to cont.Jin IWPs.  
 Key Point: Ho Kfivity in the cfNtmet from May 16' – July 31.st  
 C'106'tten6on to ero6ion control, pollut nt runoff.



## Appendix B – Outstanding Iowa Waters

<u>STREAMS</u>	<u>DESCRIPTION</u>	<u>Length (Miles)</u>
Baron Springs	Mouth (S2, T91N, R6W, Clayton Co.) to spring source (S4, T91N, R6W, Clayton Co.)	1.99
Bear Creek	From road crossing in SW ¼, NW1/4, S11, T86N, R10W, Benton Co. to E line, S25, T87N, R10W, Buchanan Co.	5.2
Bloody Run	From (W. line of Section 22, T95N, R4W, Clayton Co.) to the confluence with Unnamed Creek (NAD83) UTM Coordinates X(Easting) 645284.89 Y(Northing) 4766657.44	8.59
Brownfield Creek	Mouth (Clayton Co.) to spring source (S31, T91N, R3W, Clayton Co.)	.94
Clear Creek	Mouth (Allamakee Co.) to W. line of Section 25, T99N, R4W, Allamakee Co.	3.79
Deer Creek	Road crossing in SE¼, S35, T100N, R19W, Worth Co. to the N. line of S7, T100N, R19W, Worth Co.	7.29
Dotisman Creek	Mouth (S33, T96N, R3W, Allamakee Co.) to Allamakee-Clayton Co. line	3.44
Duck Creek	From the mouth (S14, T100N, R06W Allamakee Co.) to the Iowa-Minnesota state line	1.98
Ensign Creek (aka Ensign Hollow)	Mouth (S28, T92N, R6W, Clayton Co.) to spring source (S29, T92N, R6W, Clayton Co.)	1.05
Unnamed Creek (a.k.a. Erickson Spring Branch)	Mouth (S23, T98N, R4W, Allamakee Co.) to W. line of S23, T98N, R4W, Allamakee Co.	.91
French Creek	Mouth (Allamakee Co.) to E. line of Section 23, T99N, R5W, Allamakee Co.	5.58
Grannis Creek	Mouth (S30, T95N, R7W, Fayette Co.) to W. line of S36, T93N, R8W, Fayette Co.	3.56
Jones Creek	From the mouth (S19, T98N, R04W Allamakee Co.) to bridge crossing at Clonkitty Rd. (S14, T98N, R05W Allamakee Co.)	5.75
Kleinlein Creek	Mouth (Clayton Co.) to spring source (South Spring) (S10, T91N, R6W, Clayton Co.)	3.96

Lime Creek	From confluence with unnamed tributary in NE ¼, NW ¼, S34, T87N, R10W, Buchanan Co. to N. line of S23, T87N, R10W, Buchanan Co.	3.0
Little Paint Creek	Mouth to N. line of Section 30, T97N, R3W	1.92
Ludlow Creek	Mouth (S2, T96N, R6W, Allamakee Co.) to confluence with an unnamed tributary (S33, T97N, R6W, Allamakee Co.)	2.00
Mill Creek (aka Big Mill Creek)	Confluence with Little Mill Cr. to confluence with Unnamed Cr. (S1, T86N, R3E, Jackson Co.)	8.04
Mossey Glen Creek	Mouth (S3, T91N, R5W, Clayton Co.) to S. line of S10, T91N, R5W, Clayton Co.	1.96
North Bear Creek	Mouth (S25, T100N, R7W, Winneshiek Co.) to Iowa-Minnesota state line	6.39
Pine Creek (aka South Pine Creek)	Mouth (S26, T99N, R7W, Winneshiek Co.) to N. line of S21, T99N, R7W, Winneshiek Co.	2.80
Smith Creek (aka Trout River)	Mouth (S21, T98N, R7W, Winneshiek Co.) to S. line of S33, T98N, R7W, Winneshiek Co.	3.42
South Canoe Creek	From the mouth (S22, T99N, R08W Winneshiek Co.) to the bridge crossing at Winn Rd. (S21, T99N, R08W Winneshiek Co.)	1.90
Spring Branch Creek	Mouth (S10, T88N, R5W, Delaware Co.) to spring source (S35, T89N, R5W, Delaware Co.)	2.83
Storybook Hollow	Mouth (S7, T86N, R4E, Jackson Co.) to S. line of S12, T86N, R3E, Jackson Co.	1.37
Trout Run	Mouth (S16, T98N, R4W, Allamakee Co.) through one mile reach	1.0
Twin Springs Creek	Mouth (S17, T98N, R8W, Winneshiek Co.) to springs in Twin Springs Park (S20, T98N, R8W, Winneshiek Co.)	0.61
Unnamed Creek (aka Cold Water Cr.)	Mouth (S32, T100N, R9W, Winneshiek Co.) to N. line of Section 31, T100N, R9W, Winneshiek Co.)	2.46
Unnamed Creek (aka S. Fk. Big Mill)	Mouth (S8, T86N, R4E, Jackson Co.) to W. line of S17, T86N, R4E, Jackson Co.	0.97
Village Creek	Mouth (Allamakee Co.) to W. line of S19, T98N, R4W, Allamakee Co.	13.32
Waterloo Creek	Mouth (S35, T100N, R6W, Allamakee Co.) to Iowa-Minnesota state line	9.39
West Branch French Creek	From the mouth (S23, T99N, R05W, Allamakee Co.) to the confluence with Unnamed Creek (S26, T99N, R05W, Allamakee Co.)	.67
<b>Grand Total</b>		<b>118.08</b>

<u>LAKES</u>	<u>Description (Section, Township, Range)</u>	<u>Size (Acres)</u>
Big Spirit Lake SGMA	S33, T100N, R36W	5684
West Okoboji Lake SGMA	S20, T99N, R36W	3,847