FAQ's for Environmental Considerations, Permits, & Clearances **Issued 11-13-12**

The following summarizes each type of permit, a description of the purpose of the permit, the regulatory agency, and the Iowa DOT office responsible for obtaining the permit. In general, permits and clearances pertain to essential work within highway rights-of-way.

404 (Nationwide, Regional, & Individual) – permit to authorize placement of fill materials into waters of the United States, as required by the Clean Water Act. Nationwide, Regional, & Individual 404 Permits are defined in Chapter 10 of the Construction Manual. The regulatory agencies for 404 permits are the United States Army Corps of Engineers (USACE) and the Iowa Department of Natural Resources (Iowa DNR). The Iowa DOT Office of Location and Environment is responsible for obtaining the permit for Iowa DOT administered projects.

401 Certification – this 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 Department of Natural Resources (Iowa DNR). The Iowa DOT Office of Location and Environment is responsible for obtaining this certification for Iowa DOT administered projects.

408 (Major & Minor) – permit requires that any proposed alteration/modification to an existing Corps project (ie: 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 12-18 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 (ie: Mississippi, Missouri, or Des Moines River) 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 United States Army Corps of Engineers (USACE) and local sponsor. The Iowa DOT Office of Bridges & Structures is responsible for obtaining this certification for Iowa DOT administered projects.

Floodplain 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 insure the DNR's backwater and freeboard criteria is met for the design of the structure. The regulatory agency is the Iowa Department of Natural Resources (Iowa DNR) via the Federal Emergency Management Agency (FEMA). The Iowa DOT Office of Bridges & Structures – Preliminary Bridge is responsible for obtaining the permit for Iowa DOT administered projects.

Sovereign Lands Permits – Iowa DNR Sovereign Lands Construction Permits are required on DNR controlled lands including bridge projects over "meandered sovereign rivers". The 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 insure threatened or endangered plants or animals are not impacted and that 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 Sovereign Rivers and Lakes are attached. The regulatory agency is the Iowa Department of Natural Resources (Iowa DNR). The Iowa DOT Office of Bridges & Structures – Preliminary Bridge is responsible for obtaining the permit for Iowa DOT administered projects.

Storm Water Permits – There are two categories of Storm Water Permits that are explained in the following section; 1) General Permit #2 and 2) 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:

<u>What is it?</u> Projects that disturb greater than 1 acre require coverage under Iowa Department of Natural Resources (Iowa DNR) National Pollutant Discharge Elimination System (NPDES) General Permit #2 for storm water discharges associated with construction activities.

<u>How is it obtained?</u> 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 one acre, the prime contractor is responsible to obtain permit coverage.

<u>What are the requirements?</u> Refer to Pollution Prevention Plan (PPP) in the plans. Refer to Section 2602 in the Standard Specifications.

The regulatory agency is the Iowa Department of Natural Resources (Iowa DNR). The Iowa DOT Office of Construction is responsible for obtaining the permit for Iowa DOT administered projects.

General Permit #3:

What is it? Iowa Department of Natural Resources (Iowa DNR's) National Pollutant Discharge Elimination System (NPDES) General Permit #3 is the storm water 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 storm water 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 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 insure 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 Unites States Coast Guard (USCG). The Iowa DOT office of Bridges & Structures – Preliminary Bridge is responsible for obtaining the permit for Iowa DOT administered projects.

Threatened & 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 Construction Manual Chapter 6. A map of Topeka shiner critical habitat in Iowa is attached. The regulatory agencies are the Federal Highway Administration (FHWA), United States Fish and Wildlife Service (USFWS), and the Iowa DNR. The Iowa DOT Office of Location & 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 (FHWA), the Iowa State Historic Preservation Officer (Iowa SHPD), and the Office of the State Archaeologist. The Iowa DOT Office of

Location & Environment is responsible for obtaining this clearance for Iowa DOT administered projects with federal funding.

NEPA (National Environmental Policy Act) – established a process for environmental review of proposed transportation projects. NEPA requires approval from the Federal Highway Administration (FHWA). NEPA documents may contain construction related requirements. The regulatory agency is Federal Highway Administration (FHWA). The Iowa DOT Office of Location & 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 United States Fish and Wildlife Service (USFWS). 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 commonly associated with permits and environmental requirements.

Standard Notes for Plans:

232-3C (Native Grass Seeding/404 Permit) – Native grass seeding for projects with a 404 Permit.

232-3D (Wetland Grass Seeding/404 Permit) – Wetland grass seeding for projects with a 404 Permit.

232-9 (Indiana Bat) – Cut down all trees included in the clearing and grubbing after September 15 and before April 15.

281-1 (Section 404 Permit and Conditions) – Construct this project according to the requirements of U.S. Army Corps of Engineers _____, Permit No. _____. A copy of this permit is available from the Iowa DOT Office of Contracts upon request. Iowa DOT personnel can obtain a copy from the Office of Location & Environment. The U.S. Army Corps of Engineers 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. Stream bank 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.

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) – The Contractor shall ensure areas (including haul roads and staging areas) selected for waste or disposal of excess material (excavated material or broken concrete) or furnished borrow have been reviewed for impacts to, but not limited to, the following:

- Culturally sensitive sites or graves
- Wetlands or "Waters of the U.S.", including stream banks below the "ordinary high water mark", without an approved U.S. Army Corps of Engineer's Section 404 Permit.
- Threatened or endangered species
- Floodplains
- Sovereign lands
- Storm water discharge

2102.03, J (Archaeological Salvage) – Specifies that construction operations must be temporarily discontinued if archaeological or historical resources are encountered.

2418 (Temporary Stream Diversion) – Companion to Standard Road Plan RL-20. Temporary stream diversion involves diverting flow of a perennial stream around the construction site by use of either a diversion channel, pipe, or hose. Information is provided on the construction, use, maintenance, and removal of temporary stream diversions.

2547 (Temporary Stream Access) – Companion to Standard Road Plan RL-16. Provides information on the construction, use, maintenance, and removal of temporary structures used to provide construction access across, along, or into waters of the U.S. 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 that 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 Office of Location & Environment.

Standard Road Plans:

RL-16 (Temporary Stream Crossing, Causeway, or Equipment Pad) – Detail sheet for temporary stream crossing, causeway, or equipment pad.

RL-20 (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 (Office of Contracts inserts 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 post-letting relative to permit approvals?

A: *Contractors must bid projects based on all the contract documents. If the contract documents (ie: permits) do not state something is approved, the contractor can pursue a request to the regulatory agency for their own additional approvals. (Refer to Specification 1105.14 Protection of Water Quality and Wetlands).*

Q: If a contractor gets post-letting 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 post-letting, 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 post-letting permit approvals must be confirmed in writing from the regulatory agency and will be accepted by the Iowa DOT.*

Q: Can Iowa DOT 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 since 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?

A: The term *ordinary high water mark* means a point on a stream bank 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 stream bank 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 pre-bid communication be improved?

A: For some projects the Iowa DOT will hold possible constructability meetings and/or pre-bid meetings for discussion of the project and to received 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.

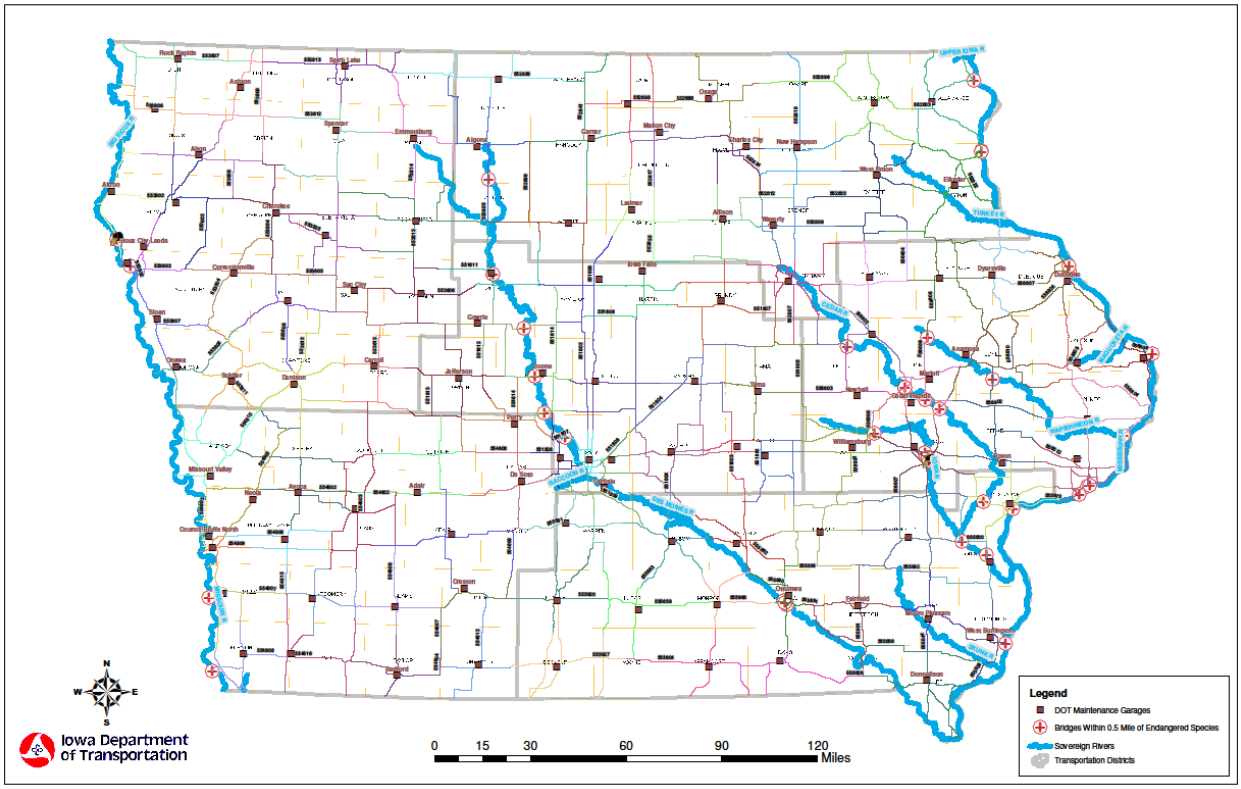
Q: Can dredging be approved ahead of time? May save $$$.

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

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

When not specifically disallowed by 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 RL-16, work pads, etc. 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 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, non-wetland locations when no longer necessary for construction of the project.



MAP OF IOWA 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.

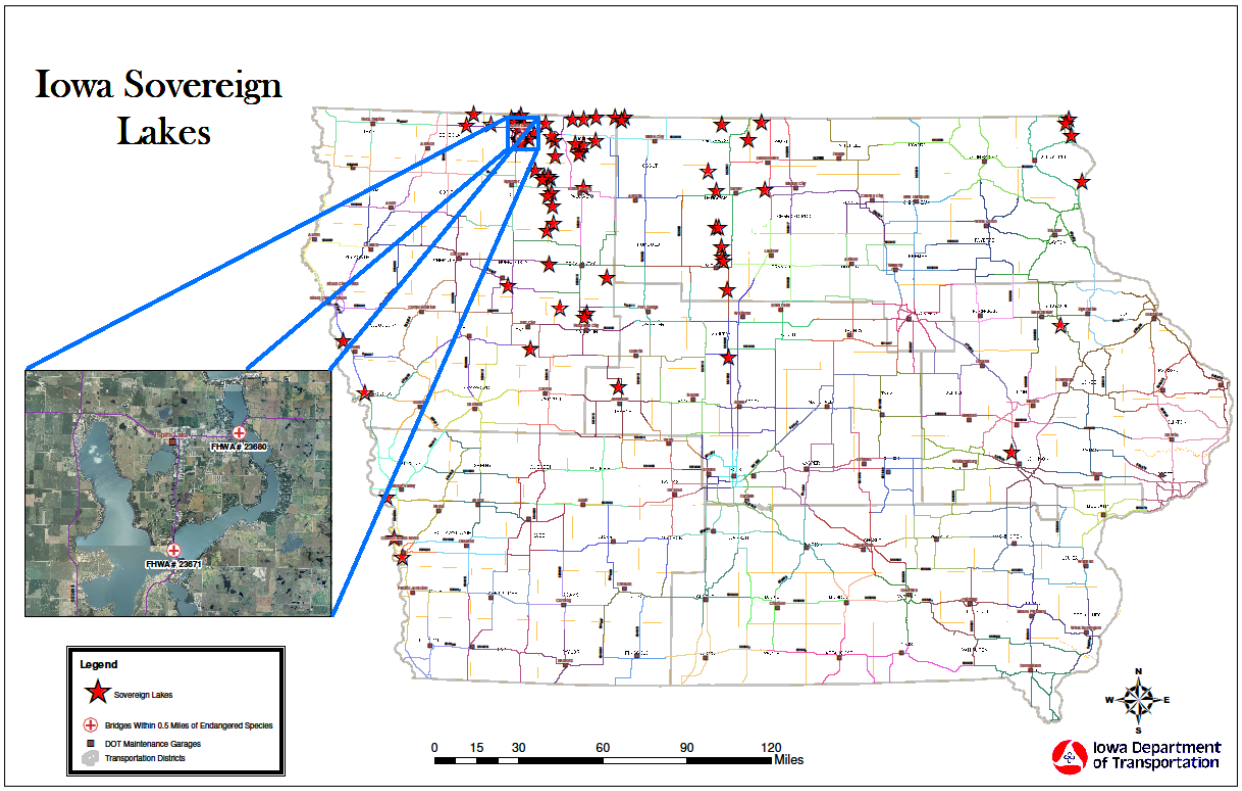
The Raccoon River from the Des Moines River to the west line of Section 30, Township 78 North, Range 25 West, Polk County.

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 SOVEREIGN LAKES

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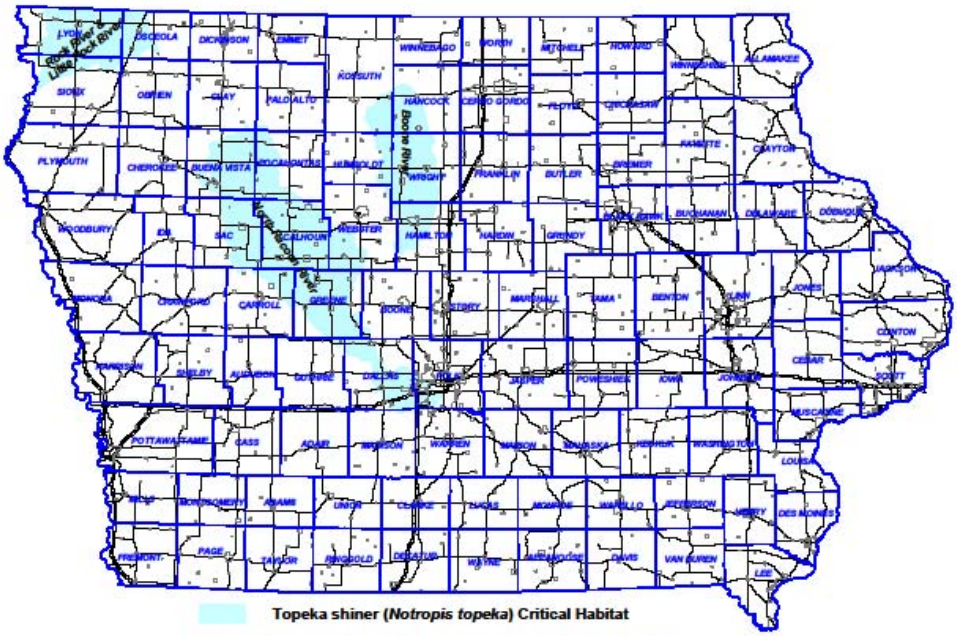
County	**Lake**
Allamakee	Kains
Lansing	Big Lake
	Mud Hen
	New Albin Big Lake
Buena Vista	Pickeral
	Storm

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
	Jemmerson 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

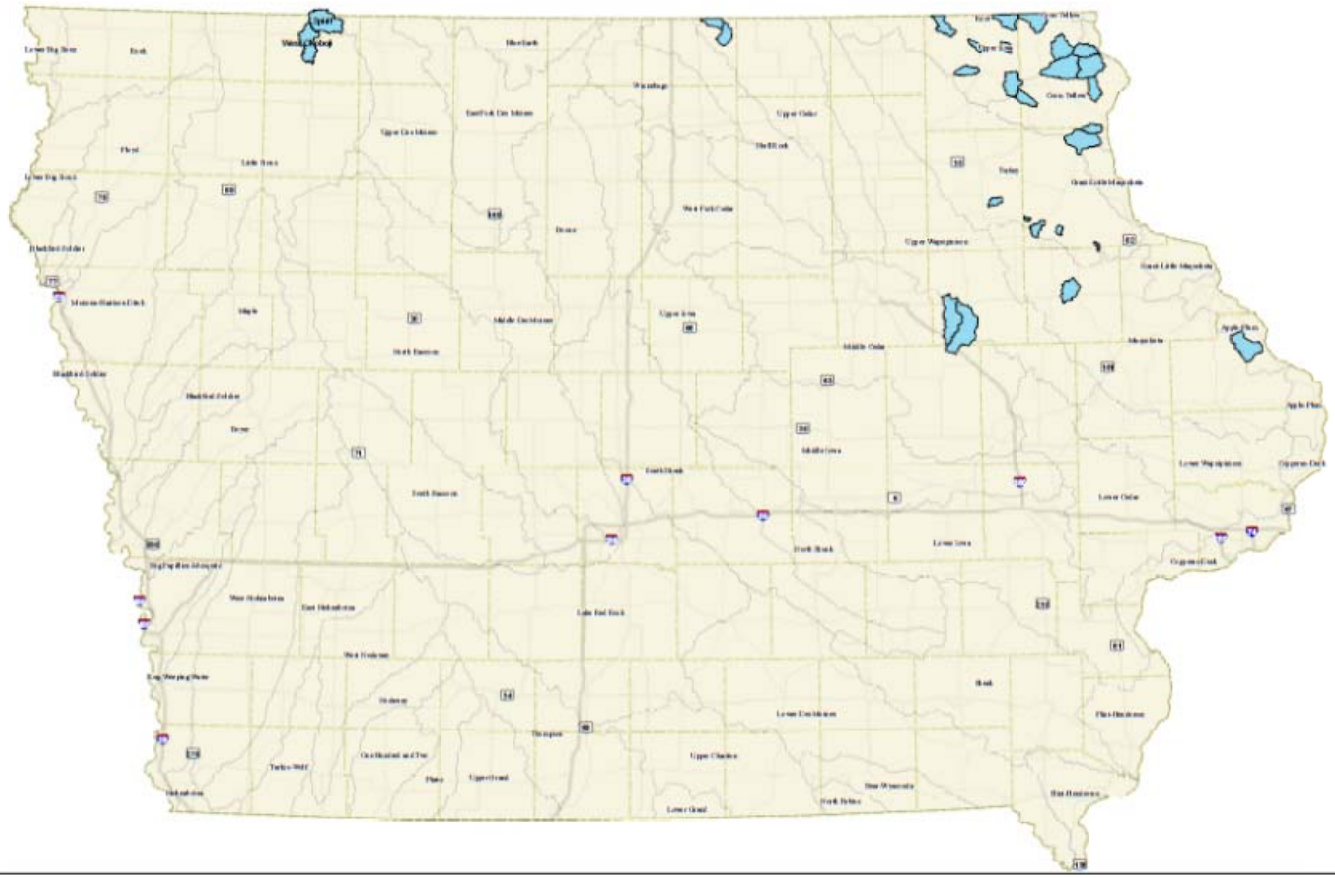


Topeka shiner (*Notropis topeka*) Critical Habitat

404 permits in these watersheds can be expect to contain BMPs.

Key Points: ***No activity in the channel from May 15th – July 31st***

Close attention to erosion control, pollutant runoff.



Iowa Department of Transportation

Created Oct. 2011

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Miles

OIW Watershed

HUC 8 Sub Basin

Outstanding Waters of Iowa Watersheds

Appendix B – Outstanding Iowa Waters

STREAMS	DESCRIPTION	Length (Miles)
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
Dousman 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 Win neshiek 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
Grand Total		**118.08**

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