

Ameren Transmission Company of Illinois's
Response to Neighbors United Data Request

In the Matter of the Application of Ameren Transmission Company of Illinois for Other Relief or, in the Alternative, a Certificate of Public Convenience and Necessity Authorizing it to Construct, Install, Own, Operate, Maintain and Otherwise Control and Manage a 345,000-volt Electric Transmission Line from Palmyra, Missouri, to the Iowa Border and an Associated Substation Near Kirksville, Missouri.
Data Request

Data Request No.: NU-8-6 - Jennifer Hernandez

Please provide copies of any and all communication between ATXI employees or its agents (including but not limited to Burns and McDonnell) and the Missouri Department of Conservation. *Surrebuttal of Christopher Wood, pages 11-12.*

RESPONSE

Prepared By: Christopher Wood; Kevin Atkins, CE. PWS, CESSWI-AI
Title: Project Manager, Burns & McDonnell Engineering Company; Environmental Scientist – Ameren Services
Date: December 21, 2015

Christopher Wood:

See the attached communications between Burns & McDonnell and the Missouri Department of Conservation.

Kevin Atkins:

See attached communications between Kevin Atkins – Ameren Services and the Missouri Department of Conservation.

NU Exhibit No. 72
Date 1-26-16 Reporter JH
File No. SA-2015-0146

Wood, Chris

From: Jennifer Campbell-Allison <Jennifer.Campbell-Allison@mdc.mo.gov>
Sent: Friday, November 21, 2014 4:43 PM
To: 'marktwaintransmission@ameren.com'
Cc: Wood, Chris; 'pladd@ameren.com'; 'Lynn, Kenneth W (KLynn@ameren.com)'; 'Holderness, Brian F (BHolderness@ameren.com)'; 'Shauna_Marquardt@fws.gov'
Subject: Conservation Department Comments 11.21.2014: reduced route network for Mark Twain transmission line
Attachments: MDCcomments_Mark Twain Transmission Project_11.21.2014.pdf;
Holderness_MarkTwainTransmissionLine.pdf;
ManagementRecommendations_MOStreams&Rivers.pdf

Ms. Berry,

Please see attached comments from the Missouri Department of Conservation regarding the reduced route network proposed for the Mark Twain transmission project.

If the Department can be of further assistance, such as through a meeting to discuss the comments provided in this or the previous letter, I may be contacted at 573-522-4115, extension 3159.

Thanks,

Jennifer Campbell-Allison
Policy Coordinator
Missouri Department of Conservation
(573) 522-4115
Jennifer.Campbell-Allison@mdc.mo.gov





MISSOURI DEPARTMENT OF CONSERVATION

Headquarters

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Telephone: 573-751-4115 ▲ www.MissouriConservation.org

ROBERT L. ZIEHMER, Director

November 21, 2014

Mark Twain Transmission Project
C/O Burns and McDonnell
Attention: Jennifer Berry
9400 Ward Parkway
Kansas City, MO 64114

RE: MARK TWAIN TRANSMISSION PROJECT - ENVIRONMENTAL COMMENTS

Ms. Berry:

This letter provides a supplemental response to Ameren's request for environmental concerns related to the Mark Twain Transmission Project and is a part of the Department of Conservation (Department) response provided in a letter to you dated October 16, 2014.

As indicated previously, the Department is the state agency responsible for forest, fish and wildlife resources in Missouri. As such, the Department participates in project review when a project might affect those resources. Department comments are for your consideration to avoid, minimize and mitigate project impacts in Missouri.

PROJECT DESCRIPTION

The proposed transmission line would total approximately 100 miles from Palmyra to Kirksville to the Iowa border. Version 10 of the route network (provided by Ameren UE staff) includes the counties of Schuyler, Adair, Knox, Lewis, Shelby and Marion. Transmission line support towers would have dimensions of up to 130 feet in height with a cleared right-of-way of approximately 150 feet.

CONTIGUOUS FOREST BLOCKS

A number of the alignments proposed as of the October 2014 Open House will result in fragmentation of woodland habitat, including forest blocks greater than 150 acres. The northerly route from Maywood to Zachary (comprised of segments A2, A6, A9, A14) fragments the fewest forest blocks.

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Jefferson City

DAVID W. MURPHY
Columbia

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Large forest blocks provide important habitat for wildlife. These habitat types are rare in present day northern Missouri and are utilized by neotropical migrant birds, currently in decline, as well as both game and non-game wildlife. Some neotropical migrant bird species are forest interior species and fragmentation of timber blocks leaves them vulnerable to brood parasitism from the brown-headed cowbird and predation. While edge habitat benefits habitat generalist species of birds, specialized species that require forest/woodland interiors are vulnerable to fragmentation caused by forest/woodland disturbances and would likely decline from a transmission line transecting the forest/woodland block.

Large forest blocks are associated with diverse wildlife species. For example, Henry Sever Lake Conservation Area is approximately 300 acres of forest and woodland habitat that supports 29 neotropical migrant bird species. Large timber blocks on the proposed routes range from 173 to 1,222 acres and likely include the same bird species, as well as additional species.

Forest blocks that would be impacted by the remaining proposed route segments on the Maywood to Zachary route are as follows:

- A2 would fragment a forest block approximately 300 acres in size at T60N, R8W Section 36 and T60N, R7W, Sections 31 and 32.
 - Two *Myotis sodalis* (Indiana bat) records are located within six (6) miles of where the A2 route segment and the subject forest block intersect.
- A3 would fragment the following forest blocks:
 - Approximately 1,222 acres: T59N, R9W, Sections 9, 10, 11, 14, 15, 22, and 23;
 - One (1) *Myotis sodalis* record within five (5) miles.
 - Approximately 181 acres: T60N, R12W, Sections 23-24;
 - Approximately 206 acres: T59N, R11W, Section 13 and T59N, R10W, Section 18;
 - Approximately 440 acres: T60N, R13W, Sections 1 and 2; and T61N, R13W, Section 36; and T61N, R12W, Section 31.
- The eastern portion of A7 includes a large forest block. According to Department records, this area includes a known Blue Heron rookery. The landowner reports that this rookery is still active.
- A13 would fragment the following forest blocks:
 - Approximately 293 acres: T61N, R14W, Sections 22 and 23;
 - Approximately 223 acres: T61N, R14W, Section 24.

Forest blocks that would be impacted by the remaining proposed route segments on the Zachary to State Line route are as follows:

- B9 would fragment a forest block (approximately 652 acres) at T65N, 15W, Section 12 and T65N, 14W, Sections 7,8 and 18.
 - Eight (8) *Myotis sodalis* and one (1) *Lasionycteris noctivagans* (silver-haired bat) records are known within four (4) miles of this forest block.

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- B13 would fragment a forest block (approximately 270 acres) at T66N, R15W, Sections 31 and 32.
 - Five (5) *Myotis sodalis* and one (1) *Lasiorycteris noctivagans* (silver-haired bat) records are known within 3 miles of this forest block.
 - Two known roosting sites are located 1.4 miles from this forest block, and are located within 0.17 miles of the proposed B13 route segment.
 - This block is adjacent to another 204 acre block at T66N, 15W, Section 31, separated by a farm road. These two blocks effectively form a 474 acre block, and it is located within four (4) miles of several other large timber blocks.

You or your client may need to consult with the U.S. Fish and Wildlife Service (573-234-2132) regarding Endangered Species Act and Migratory Bird Treaty Act compliance.

EXISTING EASEMENTS

Please refer to the earlier letter to you, dated October 16, 2014, regarding impacts to the Bringer and Bevill easements that would be impacted by route segments A2 and A1, respectively.

The South Fabius River is an important river in the northeastern portion of Missouri. Its ecological integrity and diverse aquatic community are reflective of the relatively wide and contiguous riparian woodlands and stable stream channels found in the watershed. As currently proposed, segment A2 would impact 3.95 acres of the Bringer easement, or segment A1 would impact 0.8 acres of the Bevill easement. Impacts of the proposed transmission line route segments on these easements will include riparian woodland fragmentation and an increased risk of stream channel instability.

An alternative to crossing one of these easements should include avoidance of the easement by routing around the parcel. Shapefiles of these easements were provided to Chris Wood by email on October 22, 2014.

If it is not possible to avoid the subject easement, impacts should be minimized by crossing perpendicular to the stream to reduce the area of land disturbed by right-of-way clearing.

As previously stated, a modified form of route segment A2 would appear to be the least environmentally damaging to forest, fish and wildlife resources and the Department's interest in these existing stream easements.

CONCLUSION

As presented in October 2014, the routes from Maywood to Zachary and the routes from Zachary to State Line appear to create potential impacts to forest, fish and wildlife resources in Missouri. The northerly route from Maywood to Zachary comprised of segments A2, A6, A9, A14 appears to create the fewest impacts to these resources. Alternatives and modifications to the remaining proposed route segments could focus on

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first avoiding, then minimizing, and finally mitigating impacts to forest, fish and wildlife resources.

Avoidance measures could include upgrade of existing transmission lines rather than clearing a new right of way.

Minimization measures could include paralleling the new line to existing transmission lines to avoid new fragmentation events and minimize the total number of cleared acres for the project. Another minimization measure could consider routing around forest and woodland blocks of greater than 150 acres, rather than bisecting these forest blocks.

Avoidance and minimization of impacts to the Bringer or Bevill easements are strongly encouraged. Avoidance could include routing around the easement. If avoidance were not possible, minimization could include crossing at a different location within the easement or crossing perpendicular to the waterway.

If it would be helpful, the Department would be willing to meet with Ameren, its consultant, and the U.S. Fish and Wildlife Service to discuss Department comments provided for this project.

Thank you for the opportunity to provide comments. Note that this response does not preclude other comments the Department may provide under the Clean Water Act permitting process or the National Environmental Policy Act, if applicable. If you have any questions about these comments, please contact me at (573) 522-4115, Extension 3159 or by email at jennifer.campbell-allison@mdc.mo.gov.

Sincerely,



JENNIFER CAMPBELL-ALLISON
POLICY COORDINATOR

JCA/pb

Enclosures

c: Chris Wood, Burns & McDonnell
Peggy Ladd, Ameren UE
Kenny Lynn, Ameren UE
Brian Holderness, Ameren UE
Shauna Marquart, U.S. Fish and Wildlife Service



Missouri Department of Conservation Natural Heritage Review Report

September 4, 2014 -- Page 1 of 5

Resource Science Division
P. O. Box 180
Jefferson City, MO 65102
Prepared by: Emily Clancy
Emily.Clancy@mdc.mo.gov
(573) 522 - 4115 ext. 3182

Brian F Holderness
Ameren
BHolderness@ameren.com

Project type: Transmission Line
Location/Scope: Map insert
County: Adair, Knox, Lewis, Marion, Schuyler, and Shelby
Query reference: Mark Twain Transmission Line Route
Query received: August 29, 2014

This NATURAL HERITAGE REVIEW is not a site clearance letter. Rather, it identifies public lands and sensitive resources known to have been located close to and/or potentially affected by the proposed project. On-site verification is the responsibility of the project. Natural Heritage records were identified at some date and location. This report considers records near but not necessarily at the project site. Animals move and, over time, so do plant communities. To say "there is a record" does not mean the species/habitat is still there. To say that "there is no record" does not mean a protected species will not be encountered. These records only provide one reference and other information (e.g. wetland or soils maps, on-site inspections or surveys) should be considered. Look for additional information about the biological and habitat needs of records listed in order to avoid or minimize impacts. More information may be found at <http://mdc.mo.gov/discover-nature/places-go/natural-areas> and mdc4.mdc.mo.gov/applications/mofwis/mofwis_search1.aspx. Contact information for the department's Natural History Biologist is online at <http://mdc.mo.gov/contact-us>.

Records of federal-listed and/or state-listed (endangered) species or critical habitats within one mile of the transmission line:

The following Indiana bat records are within 2 miles:

Scientific Name	Common Name	Federal Status	State Status	County	Township & Range	Section
<i>Myotis sodalis</i>	Indiana bat	Endangered	Endangered	Knox	T61N R11W	36
<i>Myotis sodalis</i>	Indiana bat	Endangered	Endangered	Adair	T63N R15W	33
<i>Myotis sodalis</i>	Indiana bat	Endangered	Endangered	Lewis	T60N R08W	17
<i>Myotis sodalis</i>	Indiana bat	Endangered	Endangered	Lewis	T60N R08W	28
<i>Myotis sodalis</i>	Indiana bat	Endangered	Endangered	Schuyler	T65N R15W	23
<i>Myotis sodalis</i>	Indiana bat	Endangered	Endangered	Schuyler	T65N R15W	16
<i>Myotis sodalis</i>	Indiana bat	Endangered	Endangered	Schuyler	T65N R15W	23
<i>Myotis sodalis</i>	Indiana bat	Endangered	Endangered	Schuyler	T65N R15W	23
<i>Myotis sodalis</i>	Indiana bat	Endangered	Endangered	Schuyler	T65N R15W	17
<i>Myotis sodalis</i>	Indiana bat	Endangered	Endangered	Schuyler	T65N R15W	9
<i>Myotis sodalis</i>	Indiana bat	Endangered	Endangered	Schuyler	T65N R15W	9
<i>Myotis sodalis</i>	Indiana bat	Endangered	Endangered	Schuyler	T65N R15W	17
<i>Myotis sodalis</i>	Indiana bat	Endangered	Endangered	Schuyler	T65N R14W	33

Indiana bats (*Myotis sodalis*, federally and state listed endangered) hibernate during winter months in caves and mines. During the summer months, they roost and raise young under the bark of trees in riparian forests and upland forests near perennial streams. During project activities, avoid degrading stream quality and where possible leave snags standing and preserve mature forest canopy. Do not enter caves known to harbor Indiana bats, especially from September to April. **Further coordination with the U.S. Fish and Wildlife Service (Ecological Services, 101 Park Deville Drive, Suite A, Columbia, Missouri 65203-0007; Phone 573-234-2132) is recommended.**

Cross-country lines affect both plants and wildlife, as do activities necessary to their construction, maintenance and repair. Stream and drainage crossings are primary concerns, and every effort should be made to avoid erosion, silt introduction, petroleum or chemical pollution, and disruption or realignment of stream banks and beds. See insert pertaining to recommendations to follow when projects may impact streams and rivers.

Revegetation is an important part of managing utility corridors, and it can have significant resource impacts – for better or worse. Revegetation of disturbed areas is recommended to minimize erosion, as is restoration with native plant species compatible with the local landscape and wildlife needs. Annuals like ryegrass may be combined with native perennials for quicker green-up. Avoid aggressive exotic perennials such as crown vetch and sericea lespedeza.

Maintenance of ground cover in utility corridors can have significant implications for sensitive resources. Native plant species typically require low maintenance over the long term, and provide more benefits to native wildlife. Utility corridors can provide wildlife travel corridors, food sources and types of low-growing plant diversity sometimes rare in adjoining land. Mowing and maintenance schedules should consider nesting seasons, and diversity in plant composition.

Natural Heritage records were identified at some date and at a more or less precise location. This report includes information about records near but not necessarily on the project site. Animals move and, over time, so do plant communities. To say "there is a record" does not mean the species/habitat is still there. To say that "there is no record" does not mean the project will not encounter something not recorded. On-site verification is the responsibility of the project. Incorporating information from Natural Heritage records into plans can help reduce adverse impacts to sensitive natural resources. However, these records only provide one reference and other information (e.g. wetland or soils maps, on-site inspections or surveys) should be considered. Compare biological and habitat needs of records listed to planned project activities to avoid or minimize impacts. More information may be found at www.mdc.mo.gov/nathis/endangered/ and mdc4.mdc.mo.gov/applications/mofwis/mofwis_search1.aspx. Find contact information on the department's nearest Natural History Biologist at <http://www.mdc.mo.gov/nathis/contacts/>.

Records of state-ranked (but not state-listed) species and natural communities of conservation concern. The Department tracks these species and natural communities due to population declines or apparent vulnerability.

The following Natural Heritage records are located within 2 miles:

Scientific Name	Common Name	State Rank	County	Township & Range	Section
<i>Hybognathus hankinsoni</i>	Brassy Minnow	S3	Adair	T62N R15W	27
<i>Mustela nivalis</i>	Least weasel	S3	Adair	T61N R14W	6

<i>Ambystoma tigrinum</i>	Eastern Tiger Salamander	SU	Schuyler	T65N R15W	3
<i>Taxidea taxus</i>	American Badger	SU	Adair	T62N R15W	2
Central Plains - Warmwater - Small river	South Fabius River	S?	Marion	T59N R06W	30
Central Plains - Warmwater - Small river	Troublesome Creek	S?	Marion	T59N R07W	15
Central Plains - Warmwater - Creek	Tiger Fork	S?	Shelby	T59N R09W	28

* Each record represents a separate occurrence.

Definitions of each state-rank

- S3: Vulnerable in the state means this species is rare and uncommon, or found only in a restricted range (even if abundant in some locations), or because of other factors making it vulnerable to extirpation. Typically 21 to 100 occurrences or between 3,000 and 10,000 individuals.
- SU: Currently unrankable due to lack of information or due to substantially conflicting information about status or trends.
- State-rank S? is defined as unranked – aquatic community is not yet ranked in the state.

The Department encourages stewardship for all state-ranked species to minimize the risk of further decline that could lead to listing.

See http://mdc.mo.gov/sites/default/files/resources/2010/04/2013_species_concern.pdf for a complete list of species and communities of conservation concern.

Recommendations related to this project or site (not specific Natural Heritage records):

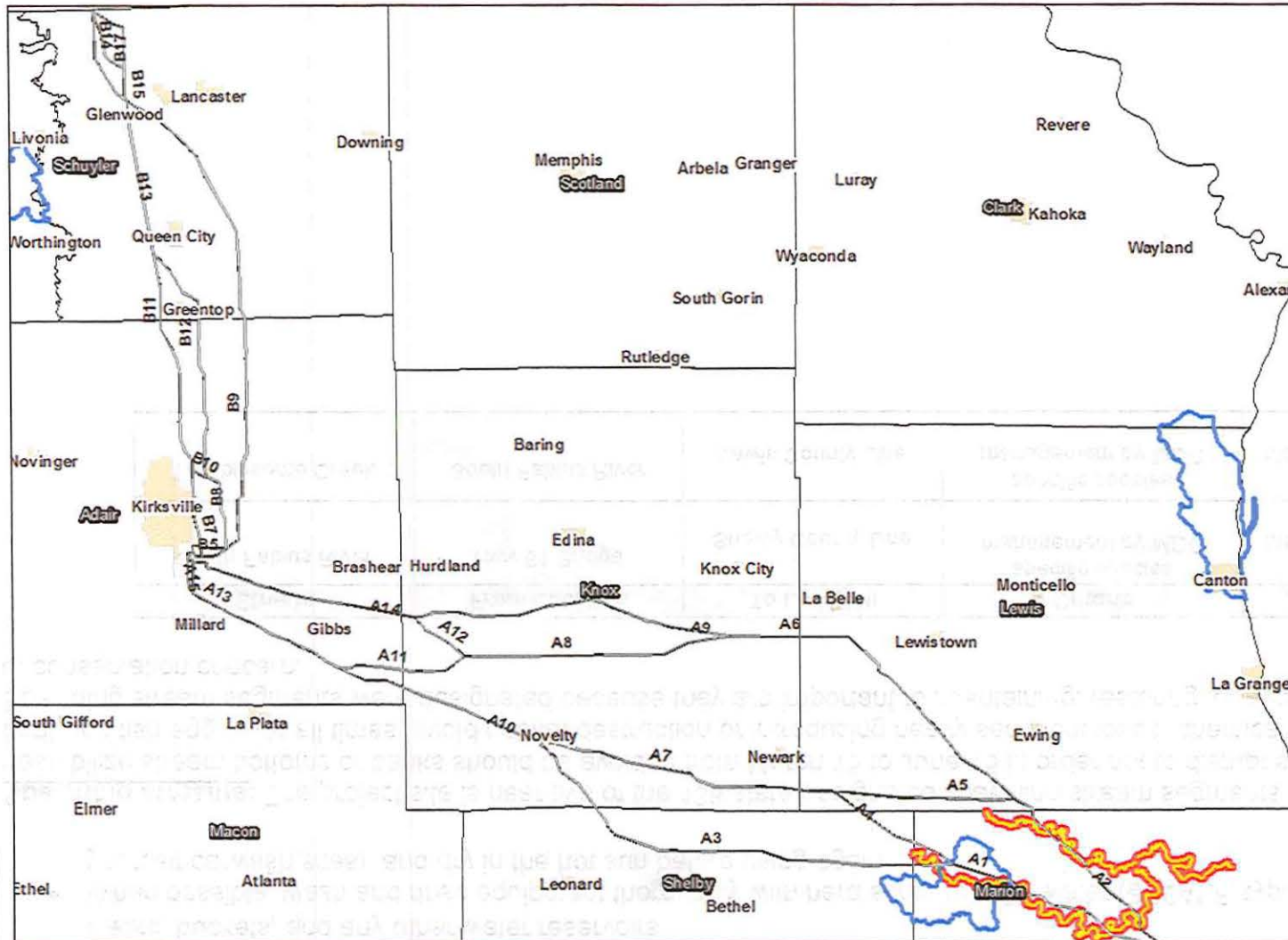
- Knox, Shelby, and Marion Counties have known [karst geologic features](#) (e.g. caves, springs, and sinkholes, all characterized by subterranean water movement). Few karst features are recorded in Natural Heritage records, and ones not noted here may be encountered at the project site or affected by the project. Cave fauna (many of which are species of conservation concern) are influenced by changes to water quality, so check your project site for any karst features and make every effort to protect groundwater in the project area.
- The project is within South Fabius River Aquatic Conservation Opportunity Area (see map insert). COAs have been identified based on the diversity and rarity of species and habitats present, and the comparative likelihood/importance of projects to maintain

them in the area over time. COAs have no regulatory role, but do reflect interest from multiple government agencies and citizen groups to work for conservation in the area. There may be ways your project or agency can contribute to or benefit from this COA. More information about it is available on line at <http://www.mdc.mo.gov/nathis/cws/coa/>.

- Invasive exotic species are a significant issue for fish, wildlife and agriculture in Missouri. Seeds, eggs, and larvae may be moved to new sites on boats or construction equipment, so inspect and clean equipment thoroughly before moving between project sites.
 - ◆ Remove any mud, soil, trash, plants or animals from equipment before leaving any water body or work area.
 - ◆ Drain water from boats and machinery that has operated in water, checking motor cavities, live-well, bilge and transom wells, tracks, buckets, and any other water reservoirs.
 - ◆ When possible, wash and rinse equipment thoroughly with hard spray or HOT water ($\geq 104^{\circ}$ F, typically available at do-it-yourself carwash sites), and dry in the hot sun before using again.

Spawning streams: The project site is near two of the 138 state-designated spawning stream segments. Activities that alter or destabilize stream bottoms or banks should be avoided from March 15 to June 15 in order not to disrupt spawning (laying and fertilizing fish eggs). At all times, avoid habitat destruction or introducing heavy sediment loads, chemical or organic pollutants. Spawning stream segments were designated because they are important to maintaining, restoring, or avoiding future listing of species of conservation concern.

Stream	From Location	To Location	Criteria	Avoidance Dates
South Fabius River	Hwy 61 Bridge	Shelby County Line	specific species management by MDC	March 15 th – June 15 th
Troublesome Creek	South Fabius River	Lewis County Line	specific species management by MDC	March 15 th – June 15 th



- Legend**
-  Route_Alignment_Version1C
 -  Spawn_Restrictions
 -  County Boundary
 -  Aquatic COA
 -  Cities

*Map created using shapefile provided in August 2014.

These recommendations are ones project managers might prudently consider based on a general understanding of species needs and landscape conditions. Natural Heritage records largely reflect only sites visited by specialists in the last 30 years. This means that many privately owned tracts could host unknown remnants of species once but no longer common.