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SEP 16 2013

Ameren Services

September 12, 2013

Mr. John Hoke
Water Protection Program
Division of Environmental Quality
Missouri Department of Natural Resources
P.O. Box 176
Jefferson City, MO 65102

Subject: Comments on "10 CSR 20-7.031 Water Quality Standards" Proposed Amendment, Published in the Missouri Register June 17, 2013"

Dear Mr. Hoke:

Thank you for the opportunity to comment on the proposed rule amendment for 10 CSR 20-7.031.

We used the Department's map viewer to carefully review proposed revisions to classified waters at Ameren facilities as portrayed in Tables G and H, in conjunction with the enhanced 100K NHD dataset. We found a number of proposed changes that we believe are invalid and request that you modify the final dataset (and maps) accordingly. In accordance with guidance received during the September 4th Water Classification Work Group Meeting, we reference each of these invalid changes using UTM coordinates accompanied with narrative descriptions. Our concerns affect waters on or near the three Ameren permitted facilities listed below.

Callaway Energy Center – NPDES Permit No. MO-0098001, Callaway County

Two proposed stream segments extend into and upstream of existing, permitted on-site storm water runoff settling ponds. These ponds were constructed with the plant's construction during the 1980's and their overflow structures have been included as designated outfalls in the facility's NPDES permit for many years. As treatment basins, they and upstream conveyances contained wholly within the industrially developed Energy Center property, are clearly not waters of the state.

1. A short stream segment (less than 300 feet long) extends into one settling pond and upstream of its designated outfall #015. The classified segment should not extend above the outfall at these UTM coordinates: Easting 605919, Northing 4292281
2. A longer stream segment (approximately 4500 feet) extends into and upstream of another settling pond, continuing well upstream of its designated outfall #011. The classified segment should not extend above the outfall at these UTM coordinates: Easting 607135, Northing 4291899.

We request that the maps and Table H designations for both of these proposed classified stream segments be revised to end at the designated outfall locations specified above.

Taum Sauk Energy Center – NPDES Permit No. MO-0001082, Reynolds County

Ameren believes two proposed lakes and four proposed stream segments are invalid at this site. The two lakes are the upper reservoir and a widened section of the East Fork of the Black River, above the "Bin Wall", both of which were constructed with the original plant construction in the early 1960's. The stream segments include three segments within the existing Lower Reservoir and the (man-made) tunnel connecting the Upper and Lower Reservoirs.

The Taum Sauk plant is a hydroelectric, pumped storage facility. The Upper Reservoir is a 55 acre basin, originally built in the early 1960's and fully reconstructed in 2010. The Lower Reservoir is a 370 acre impoundment of East Fork of the Black River. The facility operates by pumping water from the Lower Reservoir to the Upper Reservoir during off-peak hours and then draining it back thereby generating power during periods of higher demand. Water elevation within the Lower Reservoir fluctuates approximately 12 feet during each pump up / drain down cycle.

1. While seeking authorization for the recent rebuild, the US Army Corps of Engineers concluded that the Upper Reservoir was not a "waters of the US". The Department similarly concluded that the Upper Reservoir was not a waters of the State, as reflected in their 2011 issuance of a revised permit for the rebuilt facility which included a new no-discharge outfall #006, authorizing pump-back of seep water to the Upper Reservoir (in lieu of local discharge via this outfall, to waters of the state). In contrast with these determinations, the Upper Reservoir is proposed as a new lake. The UTM general coordinates (selecting a point within the 55 acre site) are: Easting 692727, Northing 4156502.
2. A segment of the East Fork of the Black River, an existing classified stream, is proposed for listing as a lake. The proposed area is just upstream of the Bin Wall, which was constructed to trap gravel and prevent accumulation within the Lower Reservoir, in conjunction with the construction of the dam which created the Lower Reservoir. Gravel within the stream above the Bin Wall is periodically (typically every three to five years) removed and placed at an upland site. We acknowledge that the stream bed in this area may be temporarily inundated during (full) drain down cycles, yet it remains a currently listed flowing stream segment. We see no justification to revise the existing stream designation by converting it to a lake classification. The UTM coordinates, centered on this water body are: Easting 690821, Northing 4154806.
3. Water flows between the Upper and Lower Reservoirs via the following conduits: a 451 foot long, 27.2 foot diameter vertical shaft (the top 100 feet of which is lined), a 4,765 foot long, 25 foot diameter (unlined) tunnel and a 1,807 foot long, 18.5 foot diameter (steel lined) tunnel and a short penstock leading to the reversible pump units. This entire, man-made, sub-surface conveyance is proposed as a new classified stream. It should be deleted. The UTM coordinates for a central location along the proposed segment are: Easting 692009, Northing 4155346.
4. An approximately 2,000 foot long open channel (including the Tailrace section) was excavated (during initial construction) to connect the pump-generating Plant to the East Fork of the Black River at the upstream end of the Lower Reservoir impoundment. This entire channel (which changes orientation and profile approximately at the Bin Wall), lies beneath the water surface of the Lower Reservoir, even during minimum Reservoir elevation. Yet this entire channel is proposed as a new stream segment and is mistakenly not included in the existing, lake designation (as depicted on the Map Viewer). The approximate UTM coordinates for this 'arm' of the Lower Reservoir are: Easting 690758, Northing 4154419. For reference, the coordinates for the upper and lower ends of this arm or segment are: at the face of the Plant - Easting 691394, Northing 4154861 and at the downstream intersection (with the existing lake designation of) the Lower Reservoir – Easting 690631, Northing 4154083. As further explained below, the boundaries of the existing classified lake should be expanded and this proposed stream segment deleted.

5. (& 6) Two proposed stream segments are located within, i.e. beneath the surface of the Lower Reservoir. While the resolution within the Map Viewer makes it unclear, this may be due to an errant decision as to how to depict the surface area of the Lower Reservoir. As stated above, the surface elevation of the Lower Reservoir fluctuates significantly, by approximately 12 feet (sometimes twice daily), resulting in significant changes to the area encompassed by this lake. The operating range is from an elevation of approximately 438.5 to 449.5 feet. Drainage from a proposed stream segment to the northeast flows into the Lower Reservoir although the lower portion is clearly within the Reservoir pool. Likewise, a proposed small stream segment to the east of the currently classified northern arm of the Lower Reservoir is within the pool. We believe that the portions of either proposed stream, lying beneath the 449.5 elevation, should be deleted. In conjunction with this change, the boundaries of the currently lake classification of Lower Reservoir should be expanded to this same, full pool elevation. For reference, the UTM coordinates for the two affected proposed stream segments are: Easting 691214, Northing 4153619 and Easting 6990612, Northing 4153784, respectively as described above.

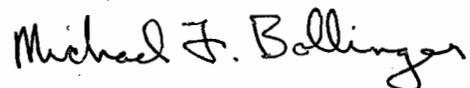
Sioux Energy Center – NPDES Permit No. MO-0000353, St. Charles County

There are two proposed lakes adjacent to and northwest of the Sioux Energy Center, that appear to be backwater pools or sloughs within the ordinary high water mark of the Mississippi River. Releases from existing Outfalls 002 and 006 flow adjacent or through these areas prior to reaching the flowing stream. Creation of new classified lakes at these locations would be wholly inconsistent with their interaction with the Mississippi River. We believe the Department should delete these proposed designations. The approximate UTM coordinates are:

1. The northernmost 'backwater pool' – Easting 733819, Northing 4311182
2. The southernmost 'backwater pool' – Easting 733819, Northing 4310829

Once again, we appreciate the opportunity to provide comments on the proposed Stream Classifications. We have included Adobe images of maps of these sites to help facilitate your review and would be happy to discuss our concerns and/or respond to any questions regarding these comments.

Sincerely,

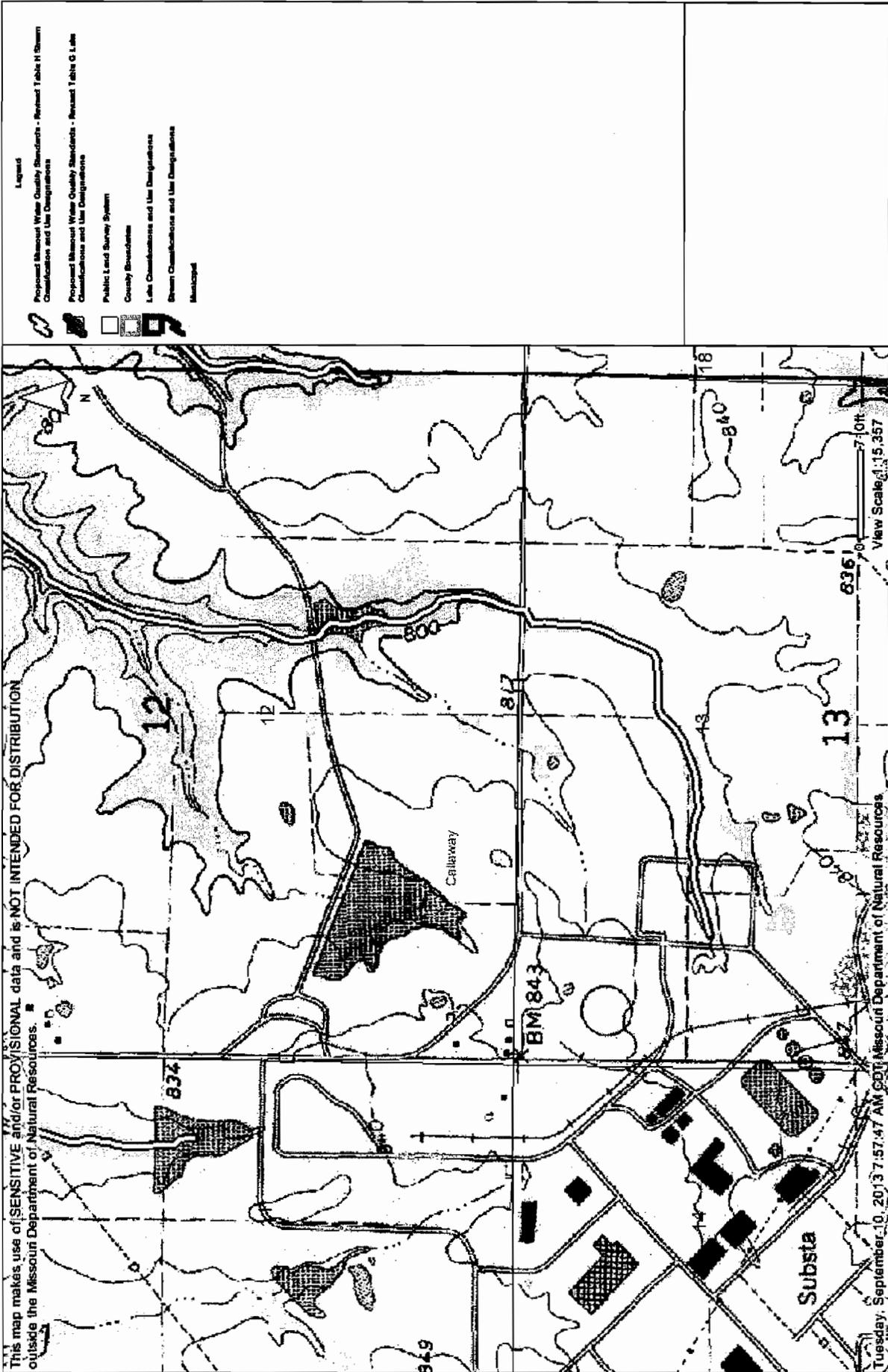


Michael F. Bollinger
Principal Environmental Scientist
Environmental Services

Attachments

Callaway Energy Center

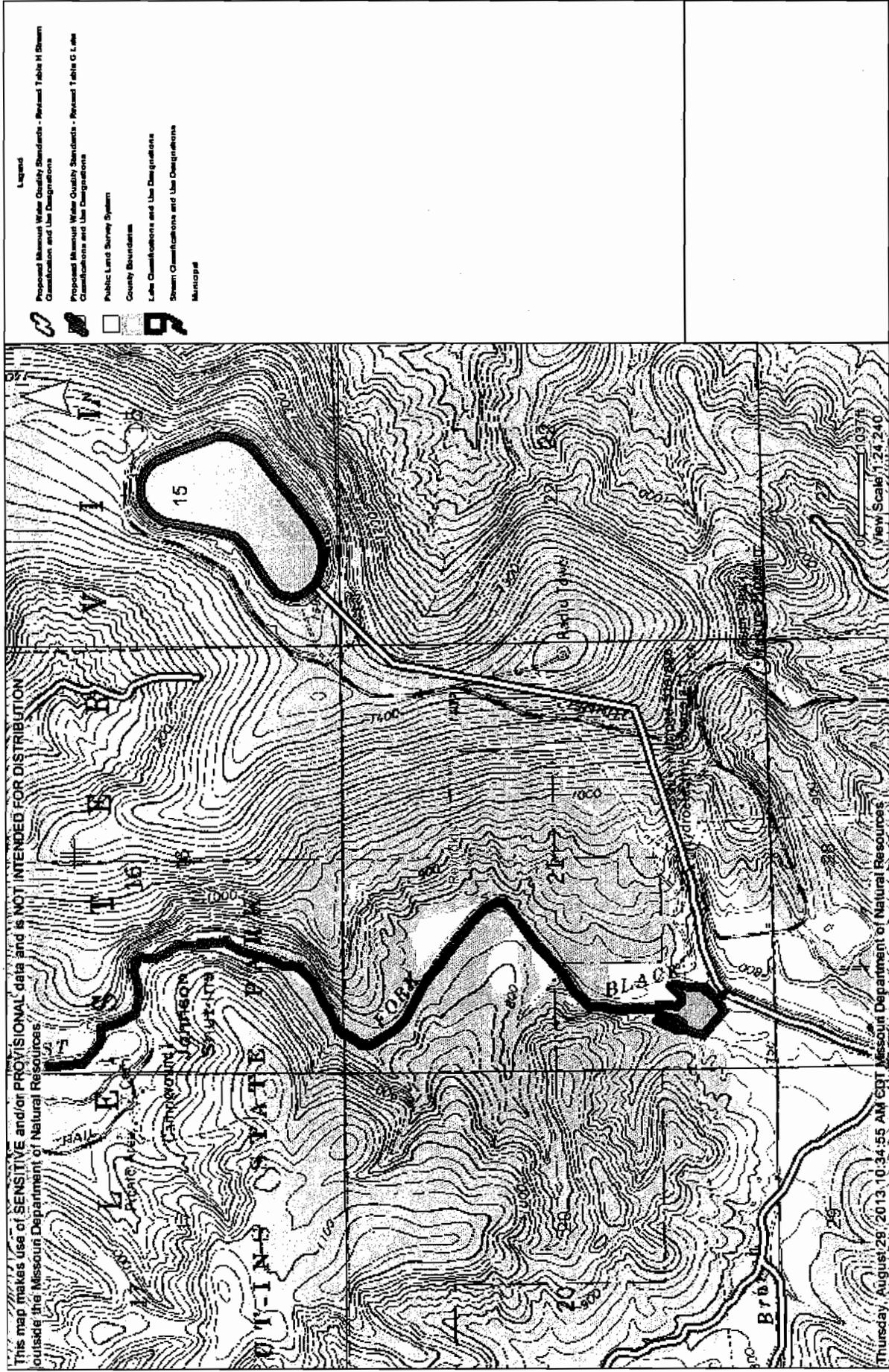
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Taum Sauk Plant UR Site

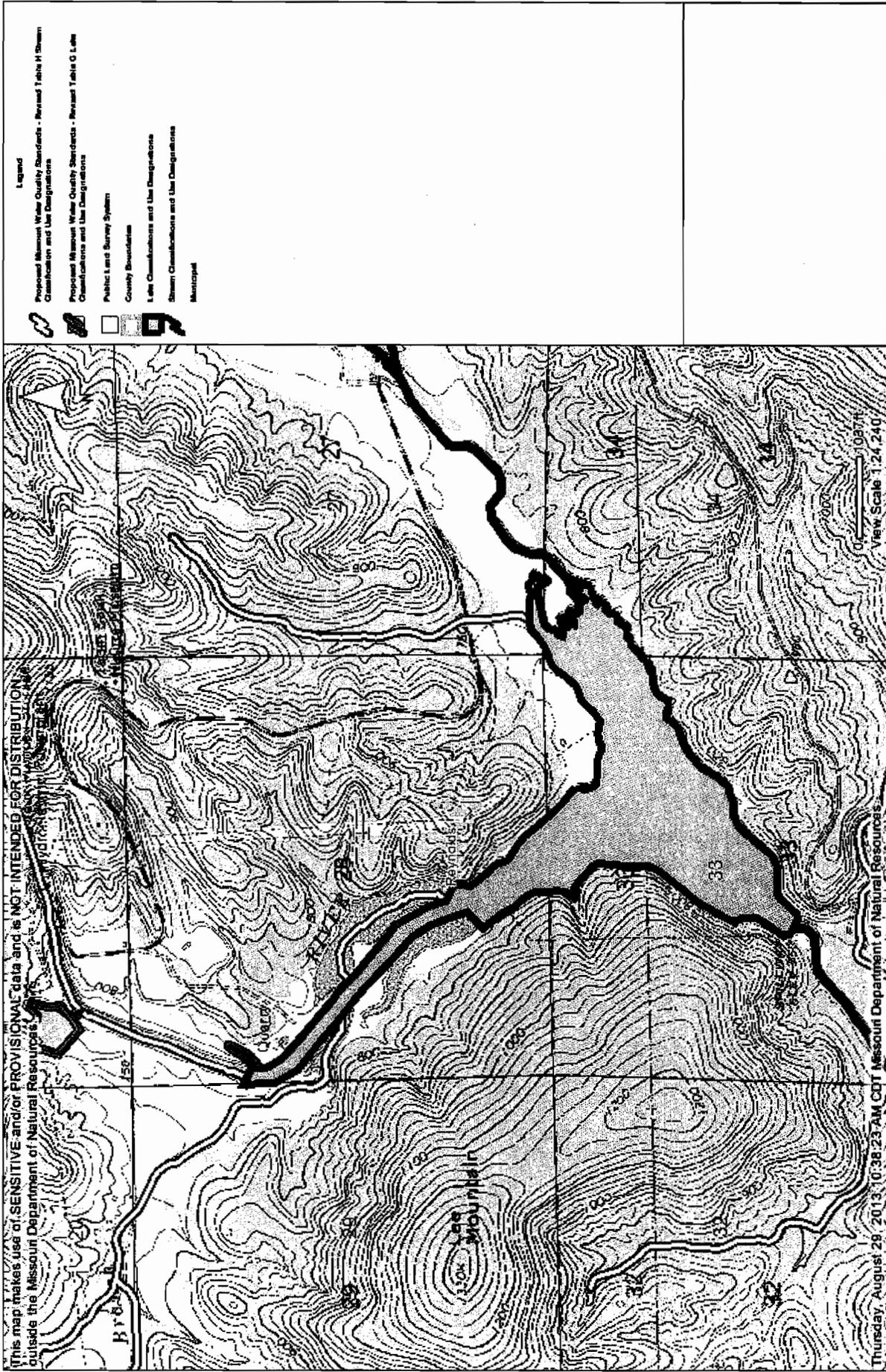


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Taum Sauk Plant LR Site

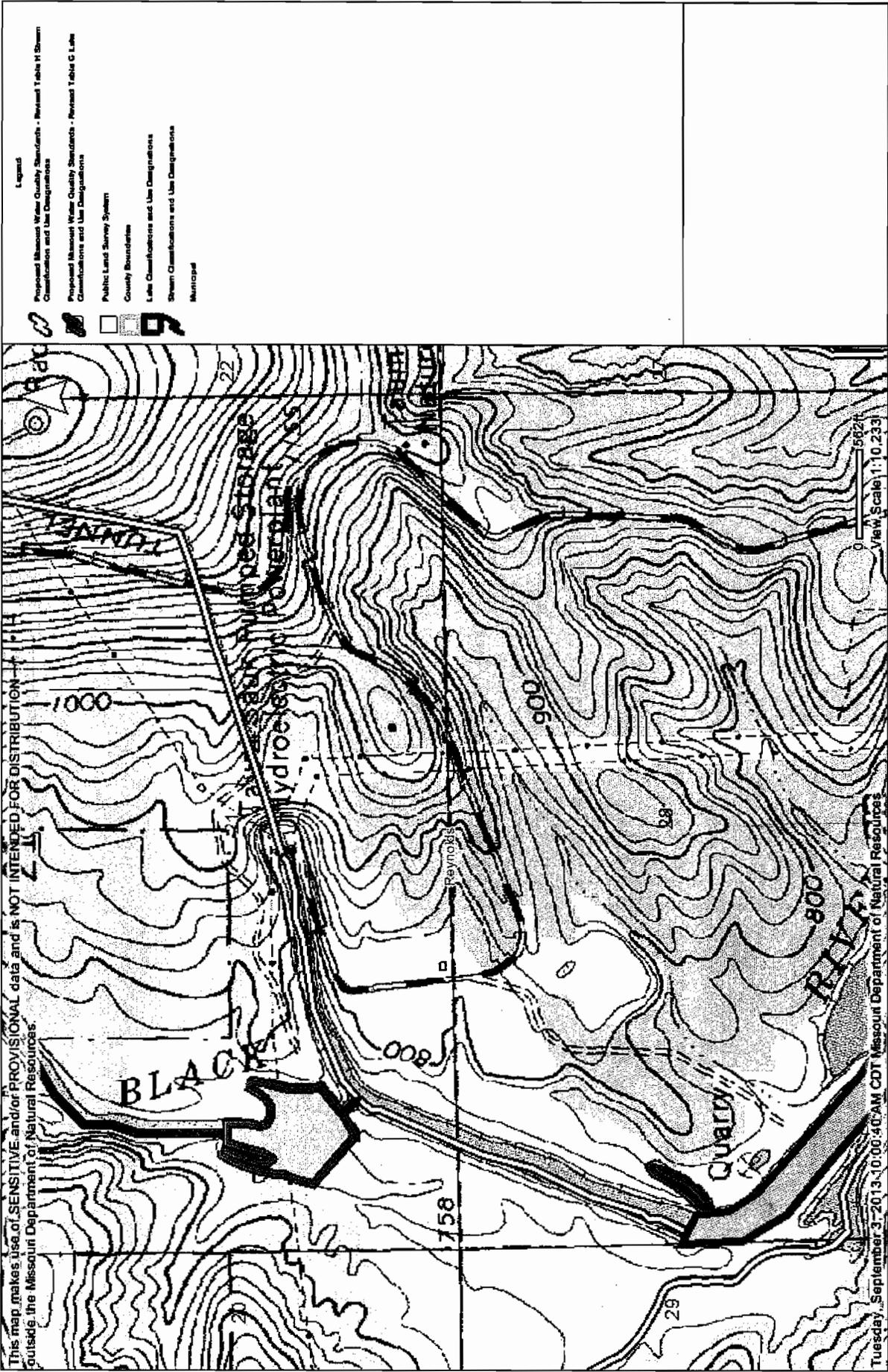
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Existing or Newly Proposed Reach of ESR or LR

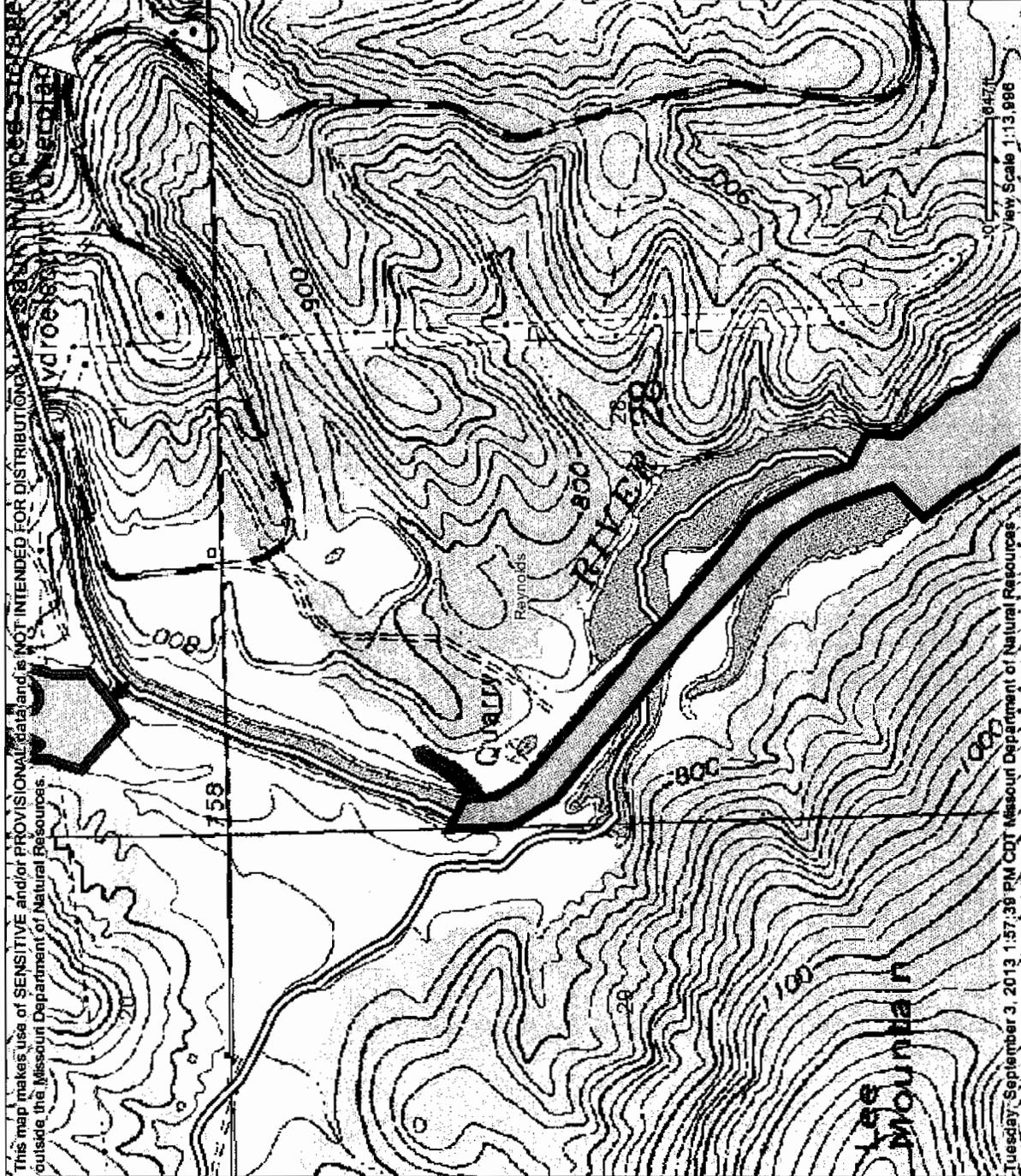


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Newly proposed streams within the LR

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- Legend**
- Proposed Missouri Water Quality Standards - Revised Table H Stream Classification and Use Designations
 - Proposed Missouri Water Quality Standards - Revised Table G Lake Classification and Use Designations
 - Public Lands Survey System
 - County Boundaries
 - Lake Classifications and Use Designations
 - Stream Classifications and Use Designations
 - Municipal

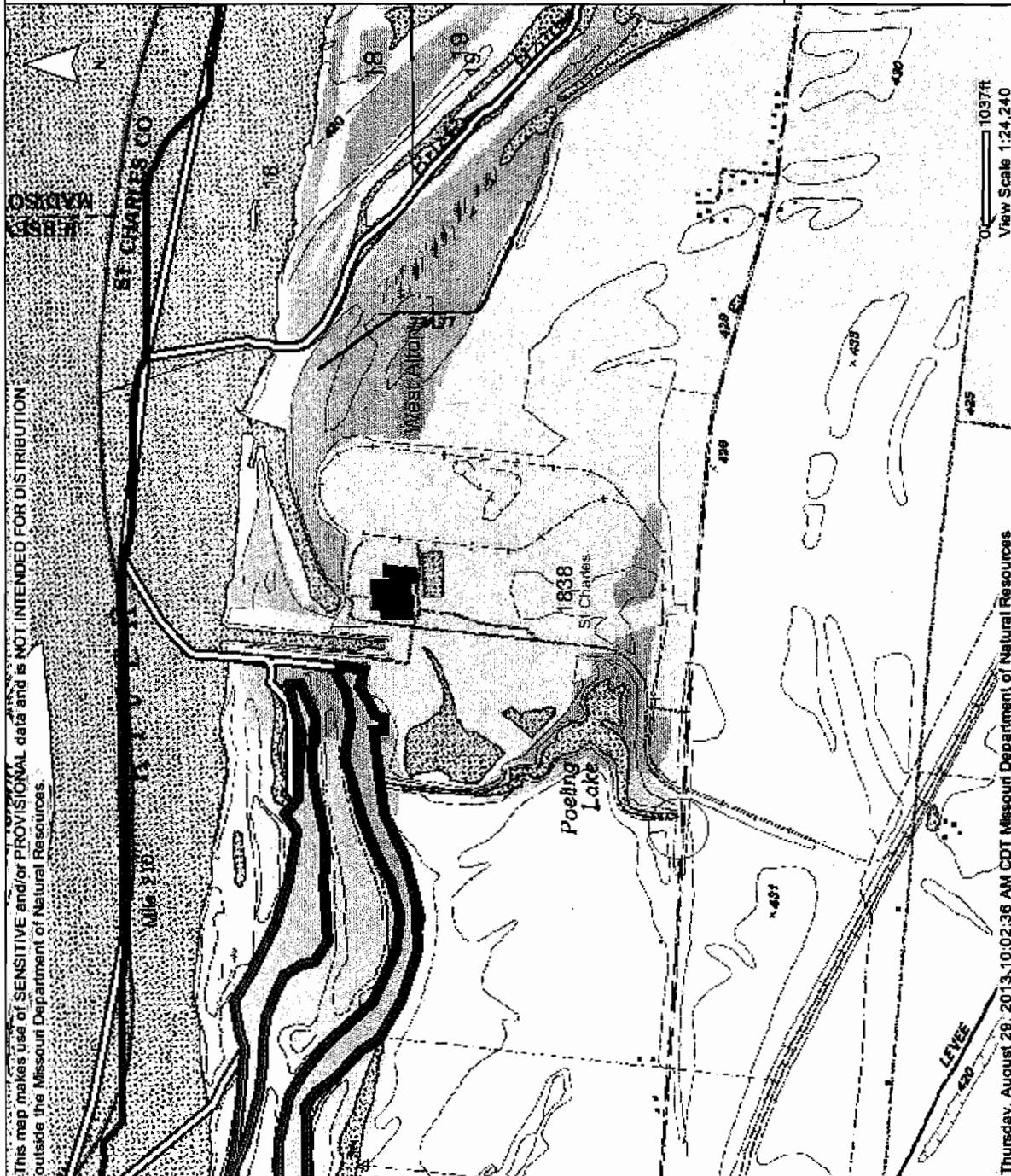


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Sioux Plant Site

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Legend

- Proposed Missouri Water Quality Standards - Revised Table H Stream Classifications and Use Designations
- Proposed Missouri Water Quality Standards - Revised Table G Lake Classifications and Use Designations
- Public Land Survey System
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- Local Classifications and Use Designations
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- Municipal

Thursday, August 29, 2013, 10:02:36 AM CDT Missouri Department of Natural Resources



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