BRANDON ROAD STUDY

Final GLMRIS Brandon Road Report & EIS review 23 Nov – 7 Jan

Recommended Plan includes:
• Nonstructural Measures
• Electric Barrier
• Acoustic Fish Deterrent
• Air Bubble Curtain
• Flushing Lock
What changed since TSP:

- Cost Increase
- Water Jets to Bubble Curtain
- Mooring Cells Removed
- Phased Implementation Strategy
- Complex Noise to Acoustic Fish Deterrent
- Appendices added:
  - Appendix H.2 - Engineering Recommended Plan
  - Appendix N - Mitigation Plan
  - Appendix O - Draft Record of Decision
  - Appendix P - Public Comment Summary Report
BRANDON ROAD STUDY

Next Steps:

• Complete Report  On schedule for January*
• Chief’s Report submitted On schedule for February*
• Design Agreement Discussions initiated, New admin*
• Design Phase Agreement signed, funding received**

Critical Path Activities for PED:

• Real Estate
• Physical Model
• Acoustic Research

* Assuming no review extensions or significant changes to the recommended plan are required.

** Design can begin when Chief’s Report is submitted and funding is allocated.
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**PROJECT SCHEDULE**

**Key Schedule Drivers**

- Completion of Chief’s Report
  - Internal & external reviews
- Non-federal sponsor/cost share agreements (DA/PPA)
- Availability of PED funds in FY 20
- Complex innovative designs increase PED duration
- Construction authorization & appropriation
- Real Estate Acquisition/HTRW
- Maintaining navigation during construction extends duration

* PED is able to begin after submittal of Chief’s Report to ASA(CW) and Design Agreement is signed pending funding
BRANDON ROAD STUDY RECOMMENDED PLAN

- **Boat Launches**: Provides access for nonstructural measures, safety and OMRR&R.
- **Flushing Lock**: Flushes floating life stages from the Lock.
- **Acoustic Fish Deterrent**: Underwater sounds to deter targeted fish.
- **Engineering Channel**: Creates a concrete channel without fish habitat. Increases the effectiveness and reduces the impacts of some measures and is a platform for future technologies.
- **Electric Dispersal Barrier**: Creates an electric field that deters fish.
- **Fish Entrainment Deterrent**: Bubble curtain removes small and stunned fish entrained in spaces between barges.
- **Support Facilities**: Infrastructure to support operations and maintenance of controls.
Risk Reduction Increment I

- Prep NRG Site
- Channel Rock Excavation
- Air Bubble Curtain
- Narrow Acoustic Deterrent Array
- Control Building
- Upstream Boat Launch

Cost $221,881,000
Design & Const. Duration 4-5 yr.

Timeline for structural implementation will be further developed in the PED phase.

Initial Risk Reduction – Nonstructural Measures begin upon appropriation of funding

Blast channel bottom. Reuse rock right descending bank property and if enough, left descending bank.
Risk Reduction Increment II

- Electric Barrier
- Wide Acoustic Deterrent Array
- Complete Control Building
- RDB wall connect to lower guidewall
- Flushing Lock

Cost $490,509,000

Design & Const. Duration 3-4 yr.

Timeline for structural implementation will be further developed in the PED phase.

Initial Risk Reduction – Nonstructural Measures begin upon appropriation of funding

Blast channel bottom.
Reuse rock right descending bank property and if enough, left descending bank.
Risk Reduction Increment III
• Finish Engineered Channel
Cost $119,881,000
Design & Const. Duration 2-3 yr.
Timeline for structural implementation will be further developed in the PED phase.

Initial Risk Reduction – Nonstructural Measures begin upon appropriation of funding

Risk Reduction Increment III

- Finish Engineered Channel
- Cost $119,881,000
- Design & Const. Duration 2-3 yr.

Timeline for structural implementation will be further developed in the PED phase.

Initial Risk Reduction – Nonstructural Measures begin upon appropriation of funding.