



## Long Term Objectives for the Kalamazoo River Oil Spill Recovery and Restoration

As the emergency response to the Kalamazoo oil spill starts to downsize, the next phase of the cleanup can begin. This phase is the long-term restoration of the river system. Over the next several months and years, this is what the residents affected by the spill can expect. Please note this is not an all-inclusive list, and that some things may be added if circumstances or conditions somehow change.

### Winter 2010/11-Spring 2011

- The water in Talmadge Creek and the Kalamazoo River consistently meets all water quality criteria of the State of Michigan.
- Any visible oil sheen that may form on Talmadge Creek from a rain event will be addressed as necessary.
- Oil sheen that may occur on the Kalamazoo River as a result of rain events or ice flow movement in the river will be addressed in the long-term operation and maintenance plans and booming strategy being developed.
- The wetlands associated with the source area and Talmadge Creek are backfilled with clean soil and then stabilized with an annual rye grass. Integrity of the area will be monitored during the winter months.
- Talmadge Creek banks will be stabilized with coir logs to maintain channel integrity.
- Soil and groundwater testing will occur through winter months in the source area and along Talmadge Creek.
- Much of the vegetation removed from the banks of the Kalamazoo River during the oil recovery process has regenerated, but will die off during winter months. The public should expect this and not be alarmed by it.
- Rehabilitated wildlife will continue to be released as long as it is safe for the animals. Enbridge anticipates the need to care for turtles at the Wildlife Response Center over the winter months.
- Efforts to capture and decontaminate oiled wildlife will continue.
- Coordinating agencies will share data and make determinations on lifting recreation ban on the river, or portions of the river, as long as cleanup and restoration efforts are not impeded.





## Long Term Objectives for the Kalamazoo River Oil Spill Recovery and Restoration *Continued*

### Summer-Fall 2011

- Water in Talmadge Creek and the Kalamazoo River consistently meet all water quality criteria for the State of Michigan.
- Infrequent visible oil sheen that may occur on Talmadge Creek from a rain event will be addressed as necessary.
- Infrequent oil sheen that may occur on the Kalamazoo River as a result of rain events will be addressed in the long-term operation and maintenance plans and a booming strategy will be developed.
- Wetland areas in the source area and Talmadge Creek will be seeded with an acceptable wetlands seed mix to re-establish a viable wetland plant community and provide for long term stabilization of the wetland and stream bank. This is pursuant to a final Restoration Plan agreed upon by the DNRE and Enbridge.
- Shrubs and trees will be planted as necessary and as identified in the long-term restoration plan for the source area and Talmadge Creek.
- DNRE and Enbridge will monitor regrowth of the vegetation along the Kalamazoo River to determine whether additional work will be necessary to stabilize any areas that are not successfully regenerating.
- An invasive species control strategy for plants will be developed for the source area, Talmadge Creek and the Kalamazoo River.
- Sampling of Kalamazoo River fish and macroinvertebrates will continue to determine population viability. Anglers on the river should expect to see DNRE staff out on the river doing sampling work, including electro-boom shocking, which stuns fish, but does not injure or kill them.
- Little to no oiled wildlife should appear within the Talmadge Creek or Kalamazoo River.





## Long Term Objectives for the Kalamazoo River Oil Spill Recovery and Restoration *Continued*

### Five Years From Now

- Completion of comprehensive ecosystem recovery.
- Water in Talmadge Creek and the Kalamazoo River continues to meet all water quality criteria for the State of Michigan.
- The source area, Talmadge Creek and Kalamazoo River should look similar to what it looked like prior to the oil spill.
- There will be diverse wetland flora and fauna communities in the response areas and little visible evidence of the oil spill.
- There will be healthy fish and macroinvertebrate communities.
- There will be remaining oil stains on large trees or other hard structures where the determination was made that additional cleanup may be more environmentally invasive or was unnecessary.
- Implementation of an effective strategy for the control of invasive plant species, including continued monitoring to ensure that invasive plants, such as purple loosestrife and reed canary grass, are not dominating the restored areas.

