

## **Appendix A**

### **Photo Log of Restoration Techniques**

## **Aquatic Vegetation Enhancement**



Photo Source: [www.dnr.maryland.gov/.../key/wild\\_celery3.html](http://www.dnr.maryland.gov/.../key/wild_celery3.html)



Photo Source: [http://www.ppws.vt.edu/scott/weed\\_id/tyhla.htm](http://www.ppws.vt.edu/scott/weed_id/tyhla.htm)

## **In-Stream Shallows Substrate Enhancement**

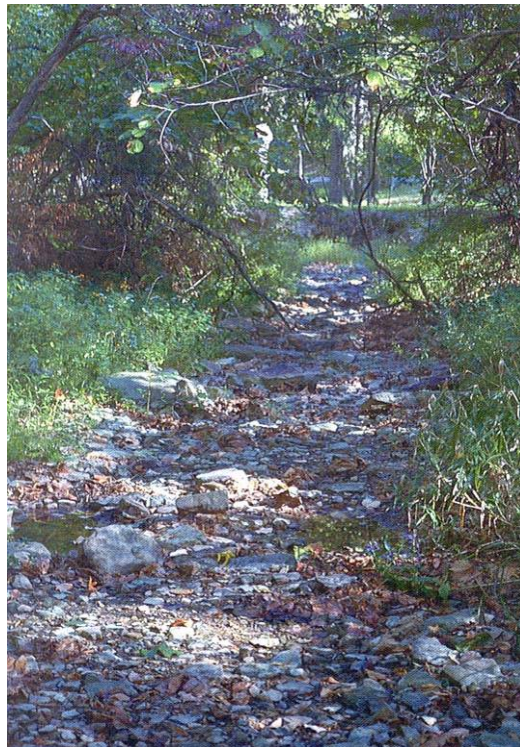
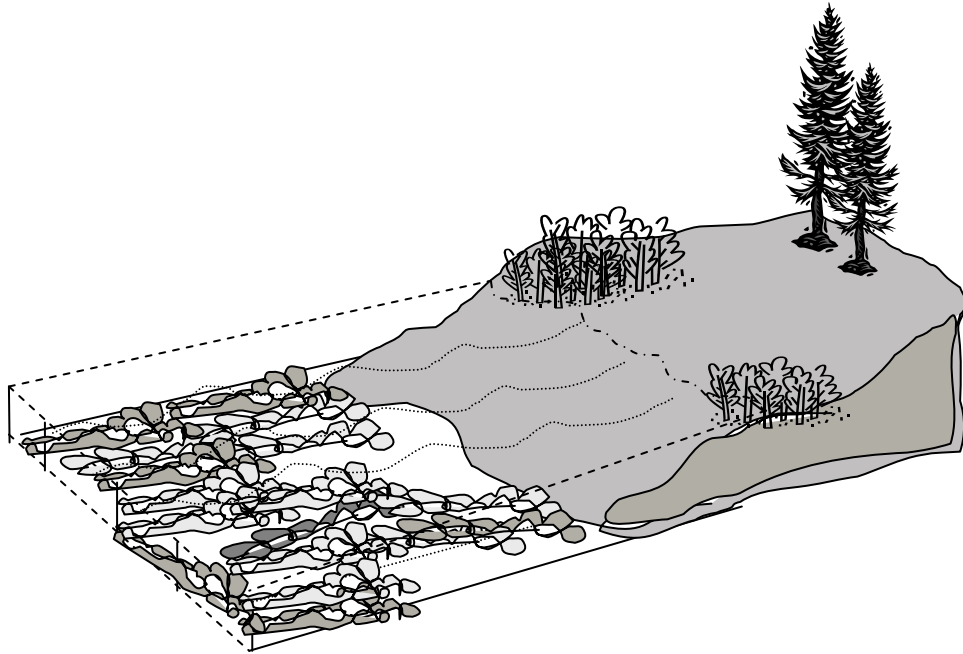


Photo Source: [dnr.state.il.us](http://dnr.state.il.us)

## **Anchored Woody Debris**



Photo Source: Dave Derrick, USACE

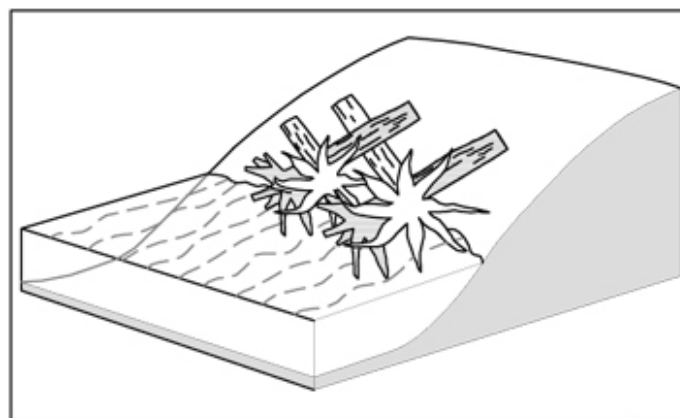
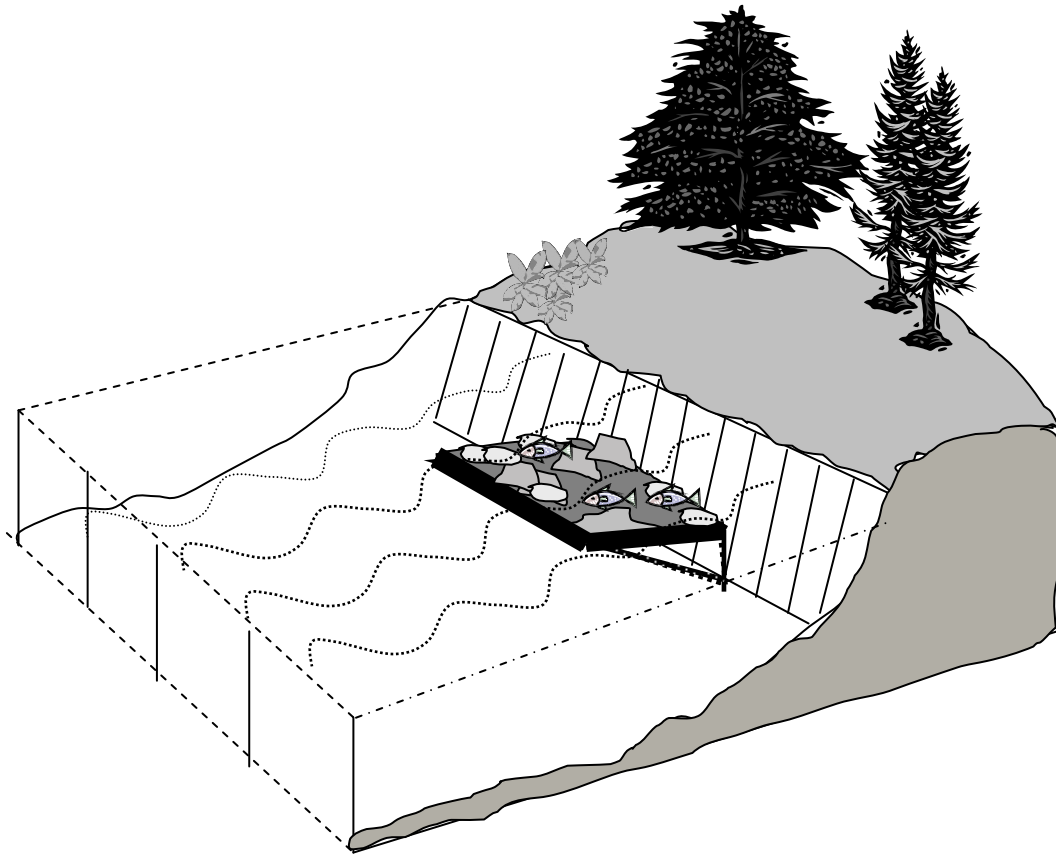


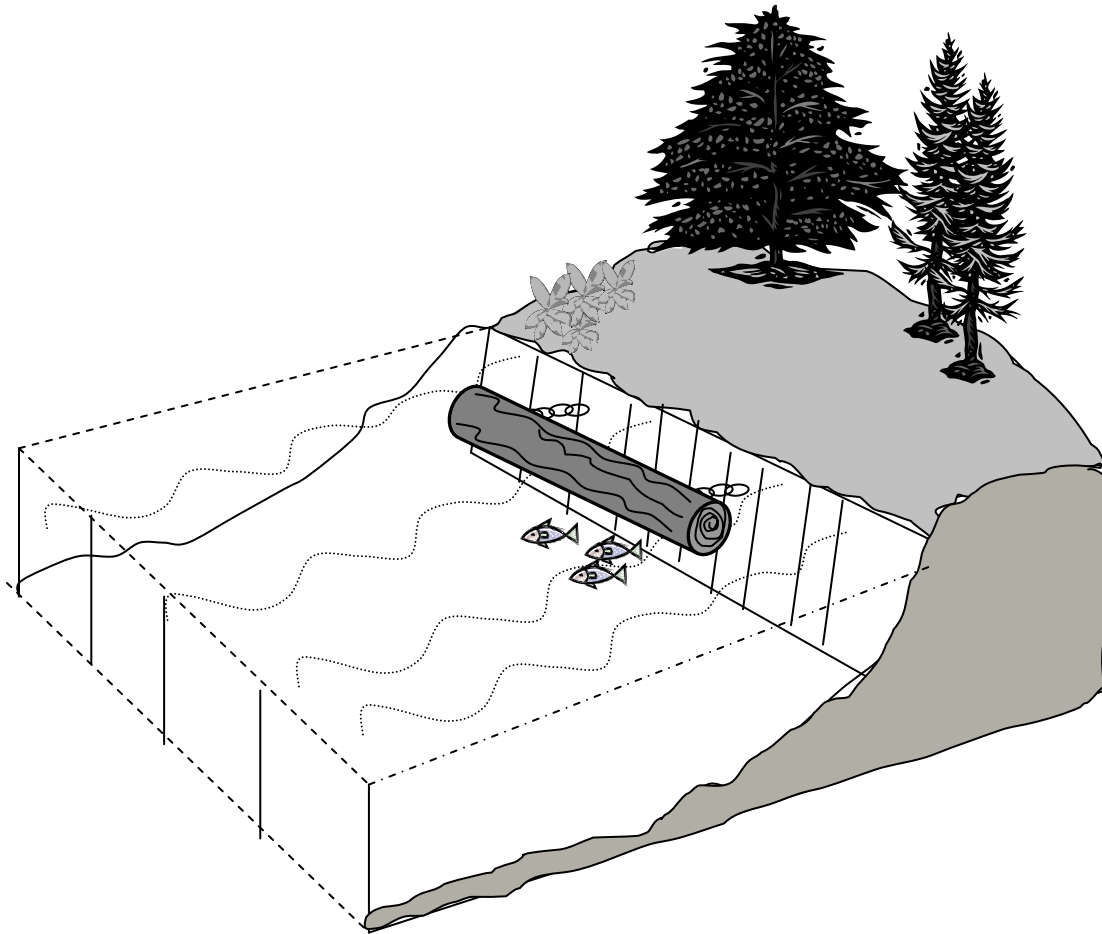
Photo Source: [www.e-senss.com](http://www.e-senss.com)



## Modified Lunker Boxes



## Floating Log Shelters



## **Rootwads**

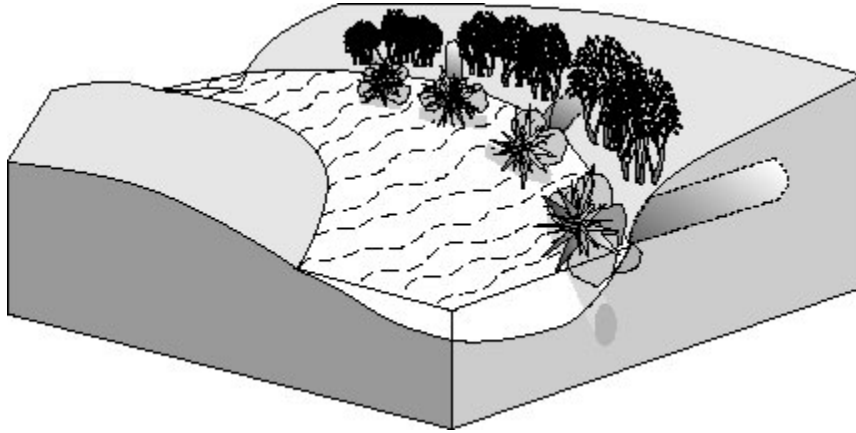


Photo Source: Stream Corridor Restoration: Principles, Processes, and Practices, 10/98, by the Federal Interagency Stream Restoration Working Group (FISRWG)



Rootwads with branch packing and live stakes after one year.

## Tree Revetments

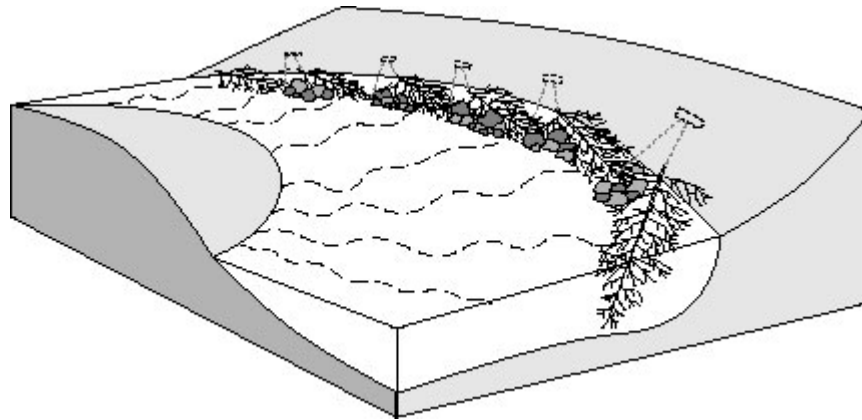


Photo Source: Stream Corridor Restoration: Principles, Processes, and Practices, 10/98, by the Federal Interagency Stream Restoration Working Group (FISRWG)



Photo Source: Dave Derrick, USACE



## **Rock and Log Vanes**

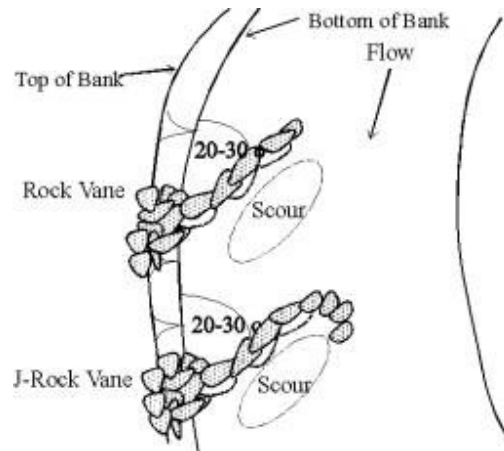


Photo source: stormwatercenter.net



Photo Source: amctu <http://www.amctu.org/picts/sandy2.jpg>



Photo Source: [www.fs.fed.us](http://www.fs.fed.us)

## **Bank Shaping**

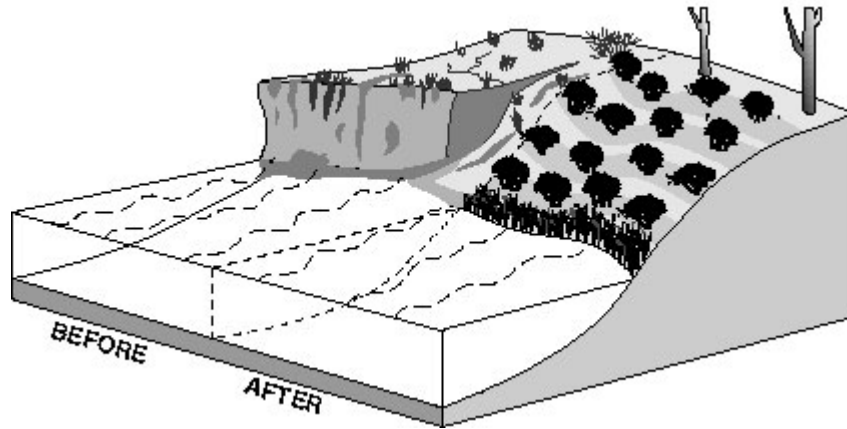


Photo Source: Stream Corridor Restoration: Principles, Processes, and Practices, 10/98, by the Federal Interagency Stream Restoration Working Group (FISRWG)



## **Stone Toe Protection**

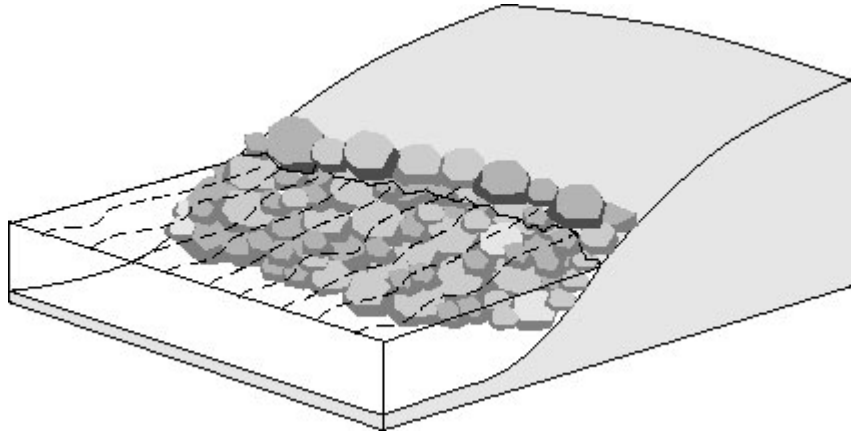


Photo Source: Stream Corridor Restoration: Principles, Processes, and Practices, 10/98, by the Federal Interagency Stream Restoration Working Group (FISRWG)



Rock toe with live posts, wrapped geogrid with branch packing, and riparian planting on far bank behind constructed riffle.



## **Wrapped Earth and Branch Packing**

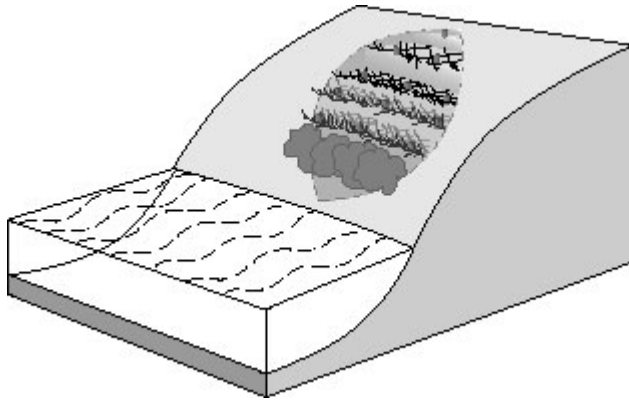


Photo Source: Stream Corridor Restoration: Principles, Processes, and Practices, 10/98, by the Federal Interagency Stream Restoration Working Group (FISRWG)



Wrapped earth with branch packing during installation.



## Living Crib Wall

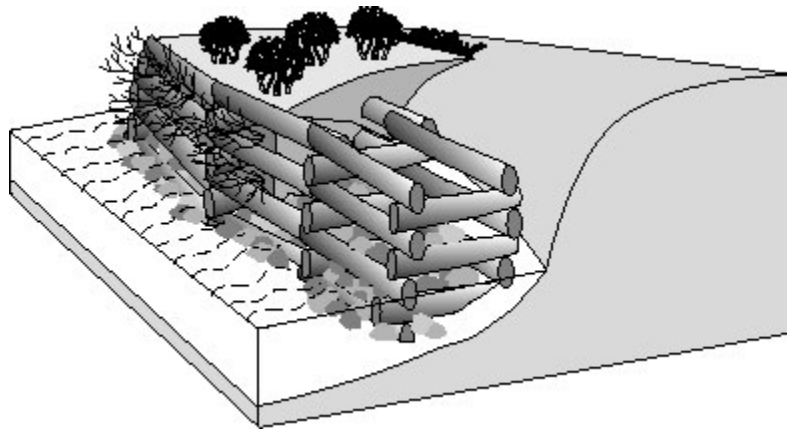
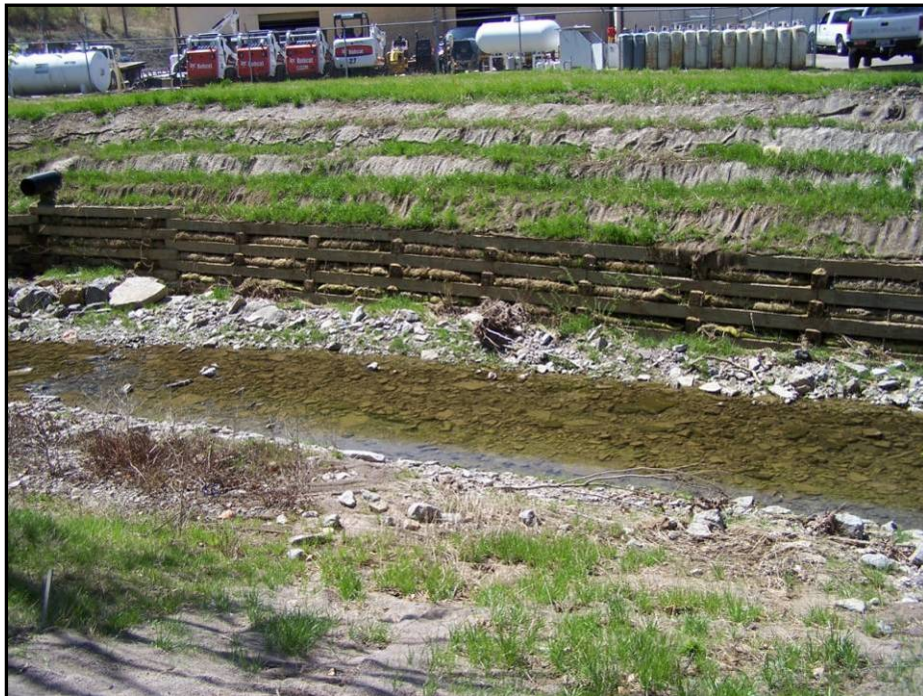


Photo Source: Stream Corridor Restoration: Principles, Processes, and Practices, 10/98, by the Federal Interagency Stream Restoration Working Group (FISRWG)



Crib wall with wrapped earth.

## Geocells

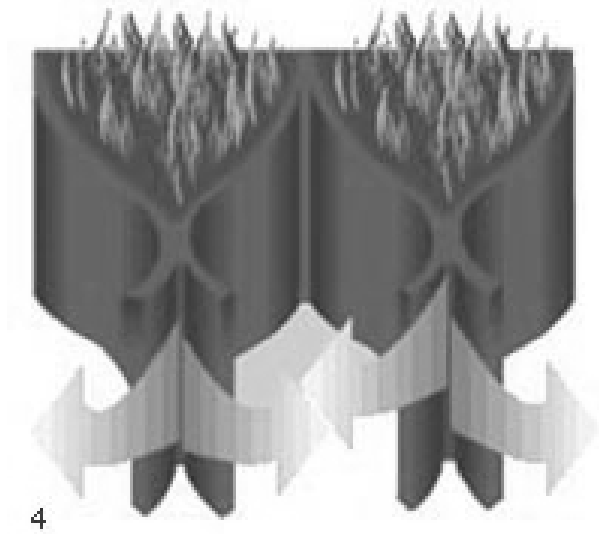
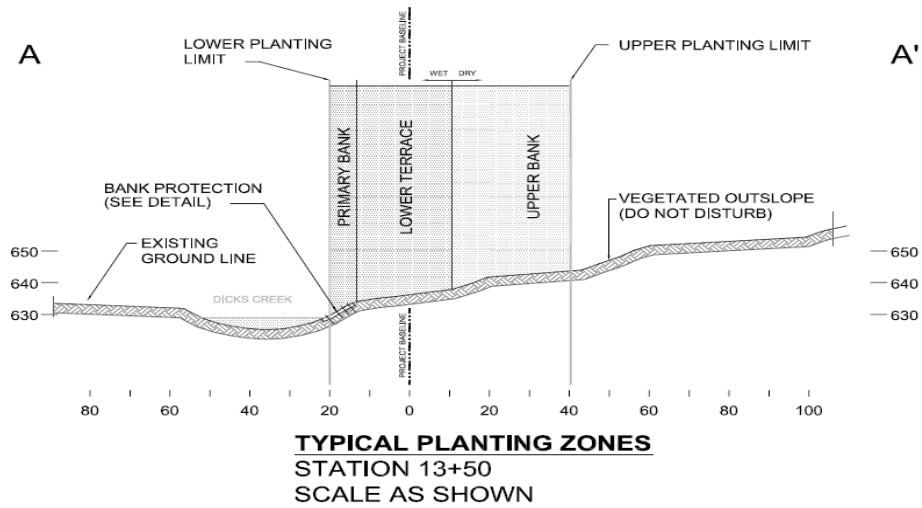


Photo Source: <http://www.polyfabrics.com.au/erosion.htm>



Geocells during installation.

## **Bank and Riparian Zone Vegetation Enhancement**





## **Expansion of Riparian Zone**

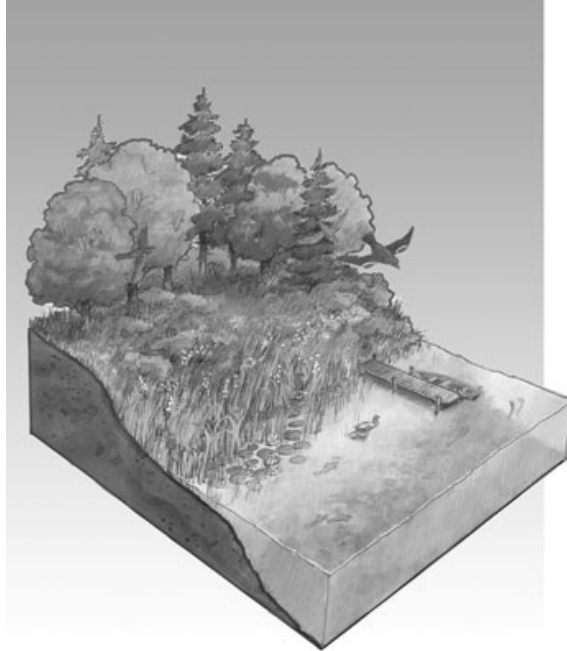


Photo source: dfo-mpo.gc.ca



Photo Source:extension.usu.edu



**Appendix B**  
**Technical Memorandum to Habitat Restoration Subgroup**

September 1, 2009

**MEMORANDUM**

To: Habitat Restoration Technical Subgroup

From: Habitat Restoration Technical Subgroup

Re: Summary of August 12, 2009 Buffalo River Site Meetings

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The habitat restoration subgroup of the Great Lakes Legacy Act Buffalo River Project Coordination Team has collaborated to identify a conceptual restoration approach for use in the Ecology Evaluation and Engineering (EEE) Report, which will be appended to the Buffalo River Feasibility Study (FS). On the morning of August 12, 2009, representatives from the United States Fish and Wildlife Service (Ray Li), the United States Environmental Protection Agency (Danielle Green), Buffalo-Niagara Riverkeeper (Jill Jedlicka), Ecology and Environment (Justin Zoladz), MACTEC (Warren High and Matt Basler), and ENVIRON (Jen Lyndall) conducted a site visit on the Buffalo River to verify piling locations and to collaborate on the conceptual restoration for selected project locations. In the afternoon of August 12, 2009, the representatives from Ecology and Environment, ENVIRON, and MACTEC met with the New York State Department of Environmental Conservation (Mike Wilkinson, Linda Ross) to present and reach consensus on the conceptual approach (agreed upon during the morning site visit) and the aquatic vegetation quality evaluation.

**Verification of Piling Locations**

One of the goals for the morning site visit was to verify the locations of certain pilings. During a previous site visit, Mike Wilkinson observed some pilings in locations that were not noted on the United States Army Corps of Engineers (USACE) piling location map (USACE 2008). These locations were verified during the August 12, 2009 site visit. Global Positioning System (GPS) locations were recorded so these new piling locations could be added to the existing USACE piling location map.

**Conceptual Restoration for Selected Project Locations**

The conceptual approaches described below for each of the six locations reflect the collaboration of the technical group present during the site visit and during the afternoon meeting. During the site visit, the conceptual restoration options were evaluated based on a variety of factors including, but not limited to: existing shoreline material, existing land use, topography, bathymetry, turbidity, light penetration, existing land ownership, existing riparian and subaquatic vegetation community quality, potential limiting factors (e.g., proximity to railroad, unwilling land owners), flow rate, shoreline stability, and potential future uses.

- Kelly Island. Existing conditions include a concrete slab shoreline that extends below the water line. Wildlife were observed perching on the few pilings that were present. Proposed restoration includes: enhancing submerged aquatic vegetation (SAV), enhancing emergent vegetation (EV), placing gravel or in-stream substrate to improve available fish spawning habitat, and replacing any pilings that may be removed during remedy implementation. In the long term, local groups may work with the property owner to determine if the owners would be willing to consider riparian zone restoration (e.g., replacing the landscaping trees with a vegetated buffer) and alternatives to the apron and concrete shoreline (e.g., Geocells).
- City Ship Canal. In the nearshore area, some overhanging vegetation was noted. The shorelines are a combination of concrete and natural shorelines. Some concrete rubble is present on the eastern bank. The water was very turbid (due to a recent storm event). The conceptual restoration approach includes: regrading the bank, clearing non-native invasive species, planting native vegetation, improving overhanging vegetation, placing rootwads and/or woody debris, and enhancing SAV and EV beds. Restoration design would need to accommodate recreational fishing boats (three to five foot depth).
- Ohio Street Shoreline. The potential restoration area of the Ohio Street shoreline will be significantly affected by the ongoing discussions of property ownership and current/future uses. On the north side of the restoration area, Mr. Paladino has purchased and clear-cut the riparian zone north of the slip. Debris from the slip area has also been removed. Mr. Paladino believes that he also has purchased the slip and the land up to the boat ramp. A title search and survey are currently underway to resolve the ownership dispute. Towards the south end of the proposed restoration area, there is a large building with questionably stable foundation (see pictures). The Rod and Gun Club has already restored a portion of their property with some human access and stabilized banks. Therefore, activities in these areas would be limited. With these limitations in mind, the group suggested that the current restoration area be limited to the small area between the slip and the building, with the assumption that the restoration area may be expanded based upon the property ownership discussions. This area could be restored by: enhancing SAV and EV, evaluating the potential for emergent wetland habitat in the slip area, and enhancing the riparian zone.
- Katherine Street Peninsula. The Katherine Street Peninsula restoration area is characterized by good overhanging vegetation and a stable bank. Therefore, this project will simply enhance existing “good” conditions, rather than restoring or creating new habitat. Proposed enhancements include: enhancing SAV and EV beds, removing invasive species (e.g., sumac, Japanese knotweed), and planting native riparian vegetation. The transmission tower will be a limiting factor to the types of trees/shrubs that can be planted in that portion of the restoration area.
- Buffalo Color Area D Shoreline. This restoration area is currently characterized by cobble/stone toe and a slurry wall. SAV and EV beds with

wetland species (e.g., arrow leaf) were observed. Potential restoration includes: evaluating whether the littoral bench can be extended, enhancing the SAV and EV beds, covering the stone toe with topsoil, and planting several smaller shrubs.

- Riverbend. The western end of the Riverbend property includes a sheetpile section. The eastern end of the property contains more naturalized shoreline. Along the western end of the property, where the sheetpile wall must remain in place, modified lunker boxes, floating log shelters, or a narrow area of in-stream substrate (cobble/gravel between wall and navigation channel) will be proposed. Along the eastern end of the property, proposed restoration includes: evaluating the bank shaping by removing some of the sheetpile and concrete areas, softening the shoreline slope, and enhancing the riparian zone. EV and SAV beds will also be included along portions of the eastern end of the Riverbend property.

The conceptual restoration projects will be described in greater detail in the EEE report. The selected conceptual restoration approaches will be refined during the design phase.

### **Vegetation Quality Scoring**

The afternoon meeting included additional discussions on the evaluation of aquatic vegetation bed quality. Mike Wilkinson agreed to prepare a one to two page technical memorandum to the habitat restoration subgroup to provide a basis and rationale for the proposed quality scoring. Jen Lyndall will provide a vegetation quality map to accompany the technical memorandum.



## **Appendix C**

### **Surveys from Project Coordination Team, Evaluation with Scoring Criteria**

**Table C-1. Buffalo Riverkeeper  
Evaluation with Scoring Criteria  
Buffalo River, NY**

**DRAFT**

<b>ID #</b>	<b>Project Name</b>	<b>Description/Techniques Proposed</b>	<b>Proximity to Remedy 5</b>	<b>Maximizes the Preferred Services from Natural Resources</b>	<b>Public Use</b>	<b>Use of Established, Successful Methods</b>	<b>Scope of Benefits</b>	<b>Addition of Ecological Benefits</b>	<b>Maximizes Time Over Which Benefits Accrue</b>	<b>Due Diligence</b>	<b>Measurability of Success</b>
KS-A1	Kelly Island - Alternative 1	Sections 2.1, 2.2	10	4	10	7	4	4	10	7	4
KS-A2	Kelly Island - Alternative 2	Sections 2.1, 2.2, 2.4	10	4	10	4	7	4	7	7	7
CSC-A1	City Ship Canal - Alternative 1	Sections 2.1, 2.2, 2.9	10	7	10	7	4	10	10	7	4
CSC-A2	City Ship Canal - Alternative 2	Sections 2.1, 2.2, 2.6, 2.9	10	7	10	4	4	10	10	7	4
CSC-A3	City Ship Canal - Alternative 3	Sections 2.1, 2.2, 2.3, 2.9	10	10	10	4	7	10	7	7	4
CSC-A4	City Ship Canal - Alternative 4	Sections 2.1, 2.2, 2.3, 2.6, 2.9, 2.14, 2.15	10	10	10	7	10	10	10	7	7
OSS-A1	Ohio Street Shoreline - Alternative 1	Sections 2.1, 2.2, 2.9, 2.10, 2.14, 2.15	7	4	7	4	1	4	10	7	1
OSS-A2	Ohio Street Shoreline - Alternative 2	Sections, 2.1, 2.2, 2.8, 2.9, 2.10, 2.14, 2.15	7	7	7	1	4	4	4	7	4
KSP(NS)-A1	Katherine Street Peninsula (Northern Shoreline) - Alternative 1	Sections 2.9, 2.10, 2.14	10	4	4	7	4	4	7	10	4
KSP(NS)-A2	Katherine Street Peninsula (Northern Shoreline) - Alternative 2	Sections 2.11, 2.14	10	7	4	4	4	4	4	10	4
KSP(NS)-A3	Katherine Street Peninsula (Northern Shoreline) - Alternative 3	Sections 2.12, 2.14	10	7	4	7	4	7	1	10	7
KSP(NS)-A4	Katherine Street Peninsula (Northern Shoreline) - Alternative 4	Sections 2.13, 2.14	10	7	4	4	7	7	1	10	7
KSP(SS)-A1	Katherine Street Peninsula (Southern Shoreline) - Alternative 1	Sections 2.1, 2.2	10	7	4	7	7	4	7	10	4
KSP(SS)-A2	Katherine Street Peninsula (Southern Shoreline) - Alternative 2	Sections 2.1, 2.2, 2.14	10	10	4	10	10	4	10	10	7
BCAD-A1	Buffalo Color Area D - Alternative 1	Section 2.1	7	10	4	7	4	4	7	10	4
BCAD-A2	Buffalo Color Area D - Alternative 2	Sections 2.1, 2.14	7	10	4	7	7	4	7	10	4
RU-A1	Riverbend Upstream - Alternative 1	Sections 2.1, 2.2, 2.9, 2.14, 2.15	7	4	10	4	4	4	1	10	1
RU-A2	Riverbend Upstream - Alternative 2	Sections 2.1, 2.2, 2.6, 2.9, 2.14, 2.15	7	7	10	7	7	4	4	10	4
RU-A3	Riverbend Upstream - Alternative 3	Sections 2.1, 2.2, 2.7, 2.9, 2.14, 2.15	7	10	10	4	10	4	4	10	7
RD-A1	Riverbend Downstream - Alternative 1	Sections 2.2, 2.14, 2.15	10	4	10	7	4	7	10	10	4
RD-A2	Riverbend Downstream - Alternative 2	Sections 2.5, 2.14, 2.15	10	7	10	4	7	7	7	10	4
RD-A3	Riverbend Downstream - Alternative 3	Sections 2.4, 2.14, 2.15	10	10	10	4	10	7	4	10	7

**Table C-2 EPA  
Evaluation with Scoring Criteria  
Buffalo River, NY**

**DRAFT**

<b>ID #</b>	<b>Project Name</b>	<b>Description/Techniques Proposed</b>	<b>Proximity to Remedy 5</b>	<b>Maximizes the Preferred Services from Natural Resources</b>	<b>Public Use</b>	<b>Use of Established, Successful Methods</b>	<b>Scope of Benefits</b>	<b>Addition of Ecological Benefits</b>	<b>Maximizes Time Over Which Benefits Accrue</b>	<b>Due Diligence</b>	<b>Measurability of Success</b>
KS-A1	Kelly Island - Alternative 1	Sections 2.1, 2.2	10	7	7	7	7	7	4	4	7
KS-A2	Kelly Island - Alternative 2	Sections 2.1, 2.2, 2.4	10	10	7	4	10	7	4	4	7
CSC-A1	City Ship Canal - Alternative 1	Sections 2.1, 2.2, 2.9	10	7	7	10	10	10	10	7	10
CSC-A2	City Ship Canal - Alternative 2	Sections 2.1, 2.2, 2.6, 2.9	10	7	7	10	10	10	10	7	10
CSC-A3	City Ship Canal - Alternative 3	Sections 2.1, 2.2, 2.3, 2.9	10	7	7	10	10	10	10	7	10
CSC-A4	City Ship Canal - Alternative 4	Sections 2.1, 2.2, 2.3, 2.6, 2.9, 2.14, 2.15	10	10	7	10	10	10	10	7	10
OSS-A1	Ohio Street Shoreline - Alternative 1	Sections 2.1, 2.2, 2.9, 2.10, 2.14, 2.15	10	7	10	7	7	10	7	7	7
OSS-A2	Ohio Street Shoreline - Alternative 2	Sections 2.1, 2.2, 2.8, 2.9, 2.10, 2.14, 2.15	10	7	10	4	10	10	4	7	7
KSP(NS)-A1	Katherine Street Peninsula (Northern Shoreline) - Alternative 1	Sections 2.9, 2.10, 2.14	10	10	4	10	10	7	7	4	7
KSP(NS)-A2	Katherine Street Peninsula (Northern Shoreline) - Alternative 2	Sections 2.11, 2.14	10	7	4	7	7	7	7	4	7
KSP(NS)-A3	Katherine Street Peninsula (Northern Shoreline) - Alternative 3	Sections 2.12, 2.14	10	4	4	7	7	4	4	4	7
KSP(NS)-A4	Katherine Street Peninsula (Northern Shoreline) - Alternative 4	Sections 2.13, 2.14	10	1	4	4	4	4	4	4	7
KSP(SS)-A1	Katherine Street Peninsula (Southern Shoreline) - Alternative 1	Sections 2.1, 2.2	10	7	4	7	4	7	7	4	7
KSP(SS)-A2	Katherine Street Peninsula (Southern Shoreline) - Alternative 2	Sections 2.1, 2.2, 2.14	10	7	4	7	7	7	7	4	7
BCAD-A1	Buffalo Color Area D - Alternative 1	Section 2.1	10	7	4	7	7	7	7	10	7
BCAD-A2	Buffalo Color Area D - Alternative 2	Sections 2.1, 2.14	10	7	4	7	7	10	7	10	7
RU-A1	Riverbend Upstream - Alternative 1	Sections 2.1, 2.2, 2.9, 2.14, 2.15	7	4	4	7	4	4	4	10	7
RU-A2	Riverbend Upstream - Alternative 2	Sections 2.1, 2.2, 2.6, 2.9, 2.14, 2.15	7	7	4	7	7	7	7	10	7
RU-A3	Riverbend Upstream - Alternative 3	Sections 2.1, 2.2, 2.7, 2.9, 2.14, 2.15	7	7	4	7	7	7	7	10	7
RD-A1	Riverbend Downstream - Alternative 1	Sections 2.2, 2.14, 2.15	7	7	4	10	7	7	7	10	7
RD-A2	Riverbend Downstream - Alternative 2	Sections 2.5, 2.14, 2.15	7	4	4	4	7	7	1	10	7
RD-A3	Riverbend Downstream - Alternative 3	Sections 2.4, 2.14, 2.15	7	4	4	7	7	7	4	10	7

**Table C-3 FWS  
Evaluation with Scoring Criteria  
Buffalo River, NY**

**DRAFT**

<b>ID #</b>	<b>Project Name</b>	<b>Description/Techniques Proposed</b>	<b>Proximity to Remedy 5</b>	<b>Maximizes the Preferred Services from Natural Resources</b>	<b>Public Use</b>	<b>Use of Established, Successful Methods</b>	<b>Scope of Benefits</b>	<b>Addition of Ecological Benefits</b>	<b>Maximizes Time Over Which Benefits Accrue</b>	<b>Due Diligence</b>	<b>Measurability of Success</b>
KS-A1	Kelly Island - Alternative 1	Sections 2.1, 2.2	10	4	1	7	1	1	4	4	10
KS-A2	Kelly Island - Alternative 2	Sections 2.1, 2.2, 2.4	10	4	1	4	1	4	4	4	7
CSC-A1	City Ship Canal - Alternative 1	Sections 2.1, 2.2, 2.9	10	7	7	7	7	4	10	10	10
CSC-A2	City Ship Canal - Alternative 2	Sections 2.1, 2.2, 2.6, 2.9	10	7	7	7	7	7	7	10	10
CSC-A3	City Ship Canal - Alternative 3	Sections 2.1, 2.2, 2.3, 2.9	10	7	7	7	7	7	7	10	10
CSC-A4	City Ship Canal - Alternative 4	Sections 2.1, 2.2, 2.3, 2.6, 2.9, 2.14, 2.15	10	10	10	7	10	10	7	10	10
OSS-A1	Ohio Street Shoreline - Alternative 1	Sections 2.1, 2.2, 2.9, 2.10, 2.14, 2.15	4	4	7	7	10	7	7	7	10
OSS-A2	Ohio Street Shoreline - Alternative 2	Sections, 2.1, 2.2, 2.8, 2.9, 2.10, 2.14, 2.15	4	4	7	7	10	10	7	7	10
KSP(NS)-A1	Katherine Street Peninsula (Northern Shoreline) - Alternative 1	Sections 2.9, 2.10, 2.14	7	7	4	7	7	7	4	7	10
KSP(NS)-A2	Katherine Street Peninsula (Northern Shoreline) - Alternative 2	Sections 2.11, 2.14	7	4	4	4	4	7	7	7	7
KSP(NS)-A3	Katherine Street Peninsula (Northern Shoreline) - Alternative 3	Sections 2.12, 2.14	7	7	4	7	4	7	7	7	10
KSP(NS)-A4	Katherine Street Peninsula (Northern Shoreline) - Alternative 4	Sections 2.13, 2.14	7	4	4	4	4	7	4	7	7
KSP(SS)-A1	Katherine Street Peninsula (Southern Shoreline) - Alternative 1	Sections 2.1, 2.2	7	4	4	7	4	1	4	7	10
KSP(SS)-A2	Katherine Street Peninsula (Southern Shoreline) - Alternative 2	Sections 2.1, 2.2, 2.14	7	7	1	7	1	4	7	7	10
BCAD-A1	Buffalo Color Area D - Alternative 1	Section 2.1	4	1	1	7	1	1	4	10	10
BCAD-A2	Buffalo Color Area D - Alternative 2	Sections 2.1, 2.14	4	4	4	7	4	4	7	10	10
RU-A1	Riverbend Upstream - Alternative 1	Sections 2.1, 2.2, 2.9, 2.14, 2.15	4	7	7	7	7	10	10	7	10
RU-A2	Riverbend Upstream - Alternative 2	Sections 2.1, 2.2, 2.6, 2.9, 2.14, 2.15	4	7	7	7	10	10	10	7	10
RU-A3	Riverbend Upstream - Alternative 3	Sections 2.1, 2.2, 2.7, 2.9, 2.14, 2.15	4	7	7	4	7	10	7	7	7
RD-A1	Riverbend Downstream - Alternative 1	Sections 2.2, 2.14, 2.15	1	4	4	7	4	7	10	7	10
RD-A2	Riverbend Downstream - Alternative 2	Sections 2.5, 2.14, 2.15	1	1	4	4	4	7	7	7	7
RD-A3	Riverbend Downstream - Alternative 3	Sections 2.4, 2.14, 2.15	1	1	4	4	4	7	7	7	7

**Table C-4. USACE  
Evaluation with Scoring Criteria  
Buffalo River, NY**

**DRAFT**

<b>ID #</b>	<b>Project Name</b>	<b>Description/Techniques Proposed</b>	<b>Proximity to Remedy 5</b>	<b>Maximizes the Preferred Services from Natural Resources</b>	<b>Public Use</b>	<b>Use of Established, Successful Methods</b>	<b>Scope of Benefits</b>	<b>Addition of Ecological Benefits</b>	<b>Maximizes Time Over Which Benefits Accrue</b>	<b>Due Diligence</b>	<b>Measurability of Success</b>
KS-A1	Kelly Island - Alternative 1	Sections 2.1, 2.2	10	4	4	7	4	4	7	7	4
KS-A2	Kelly Island - Alternative 2	Sections 2.1, 2.2, 2.4	10	4	4	7	7	4	10	7	7
CSC-A1	City Ship Canal - Alternative 1	Sections 2.1, 2.2, 2.9	10	4	7	7	7	7	1	4	4
CSC-A2	City Ship Canal - Alternative 2	Sections 2.1, 2.2, 2.6, 2.9	10	7	7	10	7	7	7	4	7
CSC-A3	City Ship Canal - Alternative 3	Sections 2.1, 2.2, 2.3, 2.9	10	4	7	7	7	10	4	4	7
CSC-A4	City Ship Canal - Alternative 4	Sections 2.1, 2.2, 2.3, 2.6, 2.9, 2.14, 2.15	10	10	10	10	10	10	10	1	10
OSS-A1	Ohio Street Shoreline - Alternative 1	Sections 2.1, 2.2, 2.9, 2.10, 2.14, 2.15	4	7	7	4	7	7	4	1	7
OSS-A2	Ohio Street Shoreline - Alternative 2	Sections, 2.1, 2.2, 2.8, 2.9, 2.10, 2.14, 2.15	4	10	10	7	10	10	7	1	10
KSP(NS)-A1	Katherine Street Peninsula (Northern Shoreline) - Alternative 1	Sections 2.9, 2.10, 2.14	7	4	4	10	4	7	10	1	7
KSP(NS)-A2	Katherine Street Peninsula (Northern Shoreline) - Alternative 2	Sections 2.11, 2.14	7	7	4	4	7	4	4	4	4
KSP(NS)-A3	Katherine Street Peninsula (Northern Shoreline) - Alternative 3	Sections 2.12, 2.14	7	7	7	7	10	4	7	4	7
KSP(NS)-A4	Katherine Street Peninsula (Northern Shoreline) - Alternative 4	Sections 2.13, 2.14	7	7	7	4	7	4	4	4	4
KSP(SS)-A1	Katherine Street Peninsula (Southern Shoreline) - Alternative 1	Sections 2.1, 2.2	7	7	4	4	4	4	4	7	4
KSP(SS)-A2	Katherine Street Peninsula (Southern Shoreline) - Alternative 2	Sections 2.1, 2.2, 2.14	7	10	7	7	7	7	7	4	7
BCAD-A1	Buffalo Color Area D - Alternative 1	Section 2.1	4	1	1	4	4	4	4	7	4
BCAD-A2	Buffalo Color Area D - Alternative 2	Sections 2.1, 2.14	4	4	4	7	7	7	7	4	7
RU-A1	Riverbend Upstream - Alternative 1	Sections 2.1, 2.2, 2.9, 2.14, 2.15	4	7	7	10	7	7	10	4	4
RU-A2	Riverbend Upstream - Alternative 2	Sections 2.1, 2.2, 2.6, 2.9, 2.14, 2.15	4	10	7	7	10	10	7	1	7
RU-A3	Riverbend Upstream - Alternative 3	Sections 2.1, 2.2, 2.7, 2.9, 2.14, 2.15	4	10	7	7	10	10	4	1	7
RD-A1	Riverbend Downstream - Alternative 1	Sections 2.2, 2.14, 2.15	4	7	4	10	10	7	10	4	4
RD-A2	Riverbend Downstream - Alternative 2	Sections 2.5, 2.14, 2.15	4	10	7	7	7	7	7	4	4
RD-A3	Riverbend Downstream - Alternative 3	Sections 2.4, 2.14, 2.15	4	10	4	4	7	7	4	4	4

**Table C-5 NYSDEC  
Evaluation with Scoring Criteria  
Buffalo River, NY**

**DRAFT**

<b>ID #</b>	<b>Project Name</b>	<b>Description/Techniques Proposed</b>	<b>Proximity to Remedy 5</b>	<b>Maximizes the Preferred Services from Natural Resources</b>	<b>Public Use</b>	<b>Use of Established, Successful Methods</b>	<b>Scope of Benefits</b>	<b>Addition of Ecological Benefits</b>	<b>Maximizes Time Over Which Benefits Accrue</b>	<b>Due Diligence</b>	<b>Measurability of Success</b>
KS-A1	Kelly Island - Alternative 1	Sections 2.1, 2.2	10	4	4	4	4	4	4	4	4
KS-A2	Kelly Island - Alternative 2	Sections 2.1, 2.2, 2.4	10	7	7	7	7	7	7	7	7
CSC-A1	City Ship Canal - Alternative 1	Sections 2.1, 2.2, 2.9	10	4	4	7	4	4	4	4	4
CSC-A2	City Ship Canal - Alternative 2	Sections 2.1, 2.2, 2.6, 2.9	10	4	7	4	7	4	4	4	4
CSC-A3	City Ship Canal - Alternative 3	Sections 2.1, 2.2, 2.3, 2.9	10	4	4	4	4	4	4	4	4
CSC-A4	City Ship Canal - Alternative 4	Sections 2.1, 2.2, 2.3, 2.6, 2.9, 2.14, 2.15	10	7	10	10	10	10	10	10	10
OSS-A1	Ohio Street Shoreline - Alternative 1	Sections 2.1, 2.2, 2.9, 2.10, 2.14, 2.15	10	4	4	4	4	4	4	4	4
OSS-A2	Ohio Street Shoreline - Alternative 2	Sections, 2.1, 2.2, 2.8, 2.9, 2.10, 2.14, 2.15	10	10	7	10	10	10	10	10	10
KSP(NS)-A1	Katherine Street Peninsula (Northern Shoreline) - Alternative 1	Sections 2.9, 2.10, 2.14	4	4	7	4	4	4	4	4	4
KSP(NS)-A2	Katherine Street Peninsula (Northern Shoreline) - Alternative 2	Sections 2.11, 2.14	4	4	7	4	4	4	4	4	4
KSP(NS)-A3	Katherine Street Peninsula (Northern Shoreline) - Alternative 3	Sections 2.12, 2.14	4	7	10	4	7	7	4	7	7
KSP(NS)-A4	Katherine Street Peninsula (Northern Shoreline) - Alternative 4	Sections 2.13, 2.14	4	4	7	4	4	4	4	4	4
KSP(SS)-A1	Katherine Street Peninsula (Southern Shoreline) - Alternative 1	Sections 2.1, 2.2	4	4	7	4	4	4	4	4	4
KSP(SS)-A2	Katherine Street Peninsula (Southern Shoreline) - Alternative 2	Sections 2.1, 2.2, 2.14	4	7	7	7	7	7	4	7	7
BCAD-A1	Buffalo Color Area D - Alternative 1	Section 2.1	7	10	7	7	7	4	7	4	7
BCAD-A2	Buffalo Color Area D - Alternative 2	Sections 2.1, 2.14	7	4	4	4	4	4	4	4	4
RU-A1	Riverbend Upstream - Alternative 1	Sections 2.1, 2.2, 2.9, 2.14, 2.15	4	4	4	4	4	4	4	4	4
RU-A2	Riverbend Upstream - Alternative 2	Sections 2.1, 2.2, 2.6, 2.9, 2.14, 2.15	4	7	10	7	7	4	7	4	7
RU-A3	Riverbend Upstream - Alternative 3	Sections 2.1, 2.2, 2.7, 2.9, 2.14, 2.15	4	7	10	7	7	7	4	7	7
RD-A1	Riverbend Downstream - Alternative 1	Sections 2.2, 2.14, 2.15	10	4	7	4	4	4	4	4	4
RD-A2	Riverbend Downstream - Alternative 2	Sections 2.5, 2.14, 2.15	10	7	10	7	7	7	7	7	7
RD-A3	Riverbend Downstream - Alternative 3	Sections 2.4, 2.14, 2.15	10	4	7	4	4	4	4	7	4



**Table C-6 ENVIRON**  
**Evaluation with Scoring Criteria**  
**Buffalo River, NY**

DRAFT

ID #	Project Name	Description/Techniques Proposed	Proximity to Remedy <sup>5b</sup>	Maximizes the Preferred Services from Natural Resources	Public Use	Use of Established, Successful Methods	Scope of Benefits	Addition of Ecological Benefits	Maximizes Time Over Which Benefits Accrue	Due Diligence	Measurability of Success	Cost <sup>c</sup>
KS-A1	Kelly Island - Alternative 1	Sections 2.1, 2.2	10	1	1	4	1	1	4	7	4	10
KS-A2	Kelly Island - Alternative 2	Sections 2.1, 2.2, 2.4	10	1	1	1	1	4	4	4	4	10
CSC-A1	City Ship Canal - Alternative 1	Sections 2.1, 2.2, 2.9, 2.14	10	4	4	7	7	4	7	7	7	1
CSC-A2	City Ship Canal - Alternative 2	Sections 2.1, 2.2, 2.6, 2.9, 2.14	10	7	4	10	7	7	10	7	7	1
CSC-A3	City Ship Canal - Alternative 3	Sections 2.1, 2.2, 2.3, 2.9, 2.14	10	7	4	7	7	7	7	7	7	1
CSC-A4	City Ship Canal - Alternative 4	Sections 2.1, 2.2, 2.3, 2.6, 2.9, 2.14, 2.15	10	10	7	10	10	10	10	1	7	1
OSS-A1	Ohio Street Shoreline - Alternative 1	Sections 2.1, 2.2, 2.9, 2.10, 2.14, 2.15	4	4	4	7	4	4	7	4	7	10
OSS-A2	Ohio Street Shoreline - Alternative 2	Sections 2.1, 2.2, 2.8, 2.9, 2.10, 2.14, 2.15	4	7	7	7	4	7	7	4	7	10
KSP(NS)-A1	Katherine Street Peninsula (Northern Shoreline) - Alternative 1	Sections 2.9, 2.10, 2.14	10	4	4	7	1	7	7	4	7	10
KSP(NS)-A2	Katherine Street Peninsula (Northern Shoreline) - Alternative 2	Sections 2.11, 2.14	10	4	4	4	1	7	4	4	7	10
KSP(NS)-A3	Katherine Street Peninsula (Northern Shoreline) - Alternative 3	Sections 2.12, 2.14	10	4	4	4	1	7	4	4	7	10
KSP(NS)-A4	Katherine Street Peninsula (Northern Shoreline) - Alternative 4	Sections 2.13, 2.14	10	4	4	4	1	4	4	4	7	4
KSP(SS)-A1	Katherine Street Peninsula (Southern Shoreline) - Alternative 1	Sections 2.1, 2.2	7	1	1	4	4	1	4	7	4	10
KSP(SS)-A2	Katherine Street Peninsula (Southern Shoreline) - Alternative 2	Sections 2.1, 2.2, 2.14	7	4	4	7	4	7	7	4	7	10
BCAD-A1	Buffalo Color Area D - Alternative 1	Section 2.1	4	1	1	4	4	1	4	10	4	10
BCAD-A2	Buffalo Color Area D - Alternative 2	Sections 2.1, 2.14, 2.15	4	4	4	4	7	7	7	4	7	7
RU-A1	Riverbend Upstream - Alternative 1	Sections 2.1, 2.2, 2.9, 2.14, 2.15	4	4	4	7	10	7	7	4	7	1
RU-A2	Riverbend Upstream - Alternative 2	Sections 2.1, 2.2, 2.6, 2.9, 2.14, 2.15	4	7	7	10	10	10	10	4	7	1
RU-A3	Riverbend Upstream - Alternative 3	Sections 2.1, 2.2, 2.7, 2.9, 2.14, 2.15	4	7	7	7	10	10	7	4	7	1
RD-A1	Riverbend Downstream - Alternative 1	Sections 2.2, 2.15	4	4	4	4	7	4	7	7	7	7
RD-A2	Riverbend Downstream - Alternative 2	Sections 2.5, 2.15	4	4	4	1	7	7	4	4	7	10
RD-A3	Riverbend Downstream - Alternative 3	Sections 2.4, 2.15	4	4	4	1	7	7	4	4	7	4

**Notes:**

- a Preferred restoration alternatives are being evaluated by the Project Coordination Team.
- b Scoring based on percent area within Remedy 5: 1=0-25%, 4=25-50%, 7=50-75%, 10=75-100%.
- c Cost scoring based on the following: 1> \$1 million, 4= \$1 million-\$500,000, 7= \$500,000-\$250,000, 10<\$250,000.