NOFO Supplemental Application Instructions

This project will be funded incrementally over the period of performance. The Service's obligation to provide incremental funding up to the total anticipated award amount is contingent on: 1) satisfactory Recipient performance and 2) the availability of funds. No legal liability on the part of the Service exists unless and until the Service obligates funds and notifies the Recipient in writing that funds are available for the purposes of this award.

The initial funding allocation will be for the assessment portion of the project. It is not possible right now to accurately budget for the design and construction phases of the project because the specifics of the individual restoration projects are unknown at this time. Therefore, complete the Budget Form (Section IV, D) and Budget Justification (Section IV, F) based on the assessment work only. The rest of the application should focus on the entire project. More detailed information about the assessment phase is provided below to assist in drafting the application and budget form and justification. In addition, please include current billing rates for applicable personnel/positions, with profit listed as a separate element, a copy of most recent annual financial statement, and a brief description of staffing capabilities. Please provide your percent profit or formula you use to apply profit.

Table 1 details the 14 potential projects that would need to be evaluated during the assessment phase of the project. All projects are located in a navigable river. Projects may require compliance with Sections 10 and 14 of the Rivers and Harbors Act, as well as Sections 404 and 401 of Clean Water Act, among others. The below descriptions are representative of the project types that are anticipated, but some variability within each category can be anticipated. Through the iterative design process, the Partners may identify other opportunities to enhance conditions at the project sites.

Backchannel Connectivity – Bank Erosion Control (BC-BEC) projects would maintain low flow habitat connectivity through river bank stabilization and preventing future deposition that would reduce hydraulic conveyance. The entity will be responsible for determining project feasibility based on effects to island access and bed erosion, among other factors. An iterative design process may require consideration of channel morphology changes effects on habitat suitability.

Backchannel Connectivity – Gravel Removal/Training Structure Modification (BC-GR/TS) projects would reconnect habitat in a back channel through modifying a federal training structure, removing gravel/cobble/boulder substrates. Target flows will be identified by the Service and the MDC. The entity will be responsible for determining project feasibility based on those flows, effects on navigation, island access, and bank stability, among other factors. An iterative design process may require refinement of target flows in the low to moderate range.

Backchannel Connectivity – Highwater Crossing Modification (BC-HWC) projects would reconnect habitat at high flows in a back channel through modification of a high water causeway from the floodplain to an island. Aquatic organism passage and sediment transport are important

considerations for this type of project. The entity will be responsible for determining project feasibility based on effects on island access and bank stability, among other factors. An iterative design process may require refinement to accommodate high flows.

Island Erosion Control (IEC) projects would maintain back channel length and low flow habitat connectivity. The entity will be responsible for determining project feasibility based on current island width and maintaining navigation, among other factors. An iterative design process may require consideration of channel morphology changes effects on habitat suitability.

Mussel Bed Protection – Bank Erosion Control and Habitat Enhancement (MBP-BEC) projects would maintain mussel bed habitat through bank stabilization. The entity will be responsible for determining project feasibility based on bank features and channel morphology, among other factors. An iterative design process may require consideration of channel morphology changes effects on habitat suitability.

Substrate Augmentation – Bank Erosion Control (SA-BEC) projects would create stream bed conditions more favorable for mussels and other invertebrates by adding gravel, structures to keep gravel in place, and bank stabilization. The entity will be responsible for determining project feasibility based on maintaining navigation and preventing island erosion, among other factors. An iterative design process will require consideration of particle sizes to add, structures designed to retain particles, and mussel habitat needs.

Training Structure Embayment Connectivity (TSE) projects would modify a federal training structure to increase low flow connectivity between the embayment and the main channel. The entity will be responsible for determining project feasibility based on maintaining navigation and preventing bank erosion, among other factors. An iterative design process may require refinement of target flows in the low to moderate range.

Table 1. Potential projects that will be evaluated during the assessment phase.

DRAFT List of Potential LORPEP Projects with Highest Ecological Benefits.
A LORPEP project will not be implemented without consent from the landowner.
No decisions have been made regarding which projects will be implemented.

KEY:	Category	Category Description	Number
	BC-BEC	Backchannel Connectivity - Bank Erosion Control	1
	BC-GR/TS	Backchannel Connectivity - Gravel Removal/Training Structure Modification	4
	BC-HWC	Backchannel Connectivity - Highwater Crossing Modification	5
	IEC	Island Erosion Control	1
	MBP-BEC	Mussel Bed Protection - Bank Erosion Control and Habitat Enhancement	1
	SA-BEC	Substrate Augmentation - Bank Erosion Control	1
	TSE	Training Structure Embayment Connectivity	1
		Total	14

Projects Sorted by Category				Information Needed for Enhancement Planning				
Row	Concerns	Possible Enhancement(s)	Category	Effects on Navigation	Bank Erosion	Island Access	Target Flow	Other
A	Maintaining backchannel connectivity; Bank erosion; Maintaining forested island	Bank Stabilization; Cooperative agreement; Streambed crossing stabilization	BC-BEC		x	x		
B	Backchannel connectivity; Backchannel temperature and dissolved oxygen	Training structure modification; Gravel removal; Bank erosion control	BC-GR/TS	x	x	x	x	Gradient survey
C	Backchannel connectivity; Backchannel temperature and DO; Bank erosion	Gravel Removal; Training structure modification; Bank erosion control	BC-GR/TS	x	x	x	x	Buried training structure?
D	Backchannel connectivity; Backchannel temperature and dissolved oxygen	Gravel removal; Hydraulic control stabilization; Bank erosion control	BC-GR/TS	x	x	x	x	Gradient Survey; Buried training structure?
E	Backchannel connectivity; Backchannel temperature and dissolved oxygen; Bank erosion	Training structure modification; Gravel removal; Bank erosion control	BC-GR/TS	x	x	x	x	Sediment transport
F	Backchannel connectivity; Backchannel temperature and dissolved oxygen	Highwater crossing modification; Gravel removal and stabilizing hydraulic control	BC-HWC		x	x	x	Buried training structure?
G	Backchannel connectivity; Sediment deposition; Maintaining forested island	Rock crossing modification; Gravel removal; Hydraulic control stabilization; Cooperative agreement	BC-HWC		x	x	x	Buried training structure?
H	Backchannel connectivity; Backchannel temperature and dissolved oxygen	Highwater crossing modification; Gravel removal; Hydraulic control stabilization	BC-HWC		x	x	x	Buried training structure?
I	Backchannel connectivity; Backchannel temperature and dissolved oxygen	Highwater crossing modification; Gravel removal; Hydraulic control stabilization	BC-HWC		x	x	x	Buried training structure?
J	Backchannel connectivity; Backchannel temperature and dissolved oxygen	Highwater crossing modification; Gravel removal; Training structure modification(?)	BC-HWC	x	x	x	x	Gradient survey; Sediment transport
K	Maintaining Backchannel connectivity; Island erosion; Backchannel temperature and DO	Island erosion control; Use rock structure to maintain low flow to backchannel	IEC	x	x		900 cfs	Effects on backchannel connectivity
L	Bank Erosion potentially affecting mussel bed and mussel reintroduction site	Bank stabilization and habitat enhancement	MBP-BEC		x			
M	Substrate armoring affecting potential for mussel colonization; Bank erosion	Structures to stabilize bank and retain gravel added on stream bed	SA-BEC	x	x			
N	Embayment connectivity; Embayment temperature and dissolved oxygen	Training structure modification	TSE	x	x		x	