Description

Proposal	200753500	Reviewer	USFWS CRFPO	Date	7/23/07	
ID						
Brief Title	Physical and Biological Field Testing of a Flow Velocity Enhancement System (FVES)					
Sponsor	Natural Solutions					

Technical Criteria

	Y or N
1. Does the proposal demonstrate that the project uses appropriate scientifically valid strategies or techniques and sound principles (best available science)?	Y
2. Are the objectives clearly defined with measurable outcomes and tasks that contribute toward accomplishment of the objectives?	N
3. Are the resources proposed (staff, equipment, materials) appropriate to achieve the objectives and time frame milestones?	Y
4. Does the proposal include monitoring and evaluation to determine whether objectives are being achieved (including performance measures/methods) at the project level?	Y
5. Will the proposed project significantly benefit the target species/ indicator populations?	N
6. Does the proposal demonstrate that project benefits are likely to persist over the long term and will not be compromised by other activities in the basin?	N
7. Does the proposal demonstrate that all reasonable precautions have been taken, to not adversely affect habitat/populations of wildlife, native resident and anadromous fish?	
8. Are there explicit plans for how the information, technology etc. from this project will be disseminated or used?	Y

Management Criteria

	Y or N
1. Does the proposed project address fish and wildlife related objectives, strategies, needs and actions with an innovative method or application of technology?	Y
2. Does the project address an urgent requirement or threat to population maintenance and/or habitat protection (i.e., threatened, endangered or sensitive species)?	Y
3. Does the project promote/maintain sustainable and /or ecosystem processes or maintain desirable community diversity?	N
4. Is there cost share for the construction/implementation and/or monitoring and evaluation of the project?	
5. Will the project complement management actions on private, public and tribal lands and does the project have demonstrable support from affected agencies,	N

tribes and public?	
6. Will the project provide data critical for in season, annual and/or longer term management decisions?	
7. Will this project provide or protect riparian or other habitat that may benefit both fish and wildlife?	
8. Will the project address a lamprey key uncertainty as identified by the lamprey technical working group?	
9. Does the project address a term and condition of the bull trout FCRPS biological opinion?	

Category (Urgent, High Priority, Recommended Action, Do Not Fund)

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Assignment.	Recommended Action		
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Brief Description/Rationale:

The proposal presents an innovative approach to evaluate whether creation of a water velocity-turbulence field can assist in guiding juvenile salmon toward traps. If successful, the approach may provide opportunities to decrease smolt residence time in reservoirs and increase capture at traps or entry into bypass systems at dams. Because the proposed project would evaluate a method that may directly contribute to improvements in survival or productivity of smolts and is an innovative pilot project, it appears to be consistent with all requirements in the FY 2007-09 proposal solicitation. The proposal could be strengthened by a more comprehensive assessment of physical habitat conditions (e.g., water temperatures and turbidity) during the project, especially relative to profiles of variables when the FVES system is operating and when it is not. In addition, inspecting fish collected in the trap for injuries and retaining a subsample in a livebox for 24 hours to determine delayed mortality would allow comparisons to further evaluate potential effects of the FVES system on fish. When in operation, the screen and water intake should be monitored for impinged fish so that potential effects of the FVES system can be evaluated Given the nature of the proposal and information it may potentially yield, it should be considered a recommended action.