

## GENERAL RECOVERY PROGRAM SUPPORT ACTION PLAN

	ACTIVITY	WHO	STATUS	FY 06 10/05 9/06	FY 07 10/06 9/07	FY 08 10/07 9/08	FY 09 10/08 9/09	FY 10 10/09 9/10	FY 11 10/10 9/11	OUT YEARS
<b>I.</b>	<b>PROVIDE AND PROTECT INSTREAM FLOWS (HABITAT MANAGEMENT)</b>									
I.A.	Evaluate methods for defining habitat-flow needs and select methods most appropriate to specific stream reaches.									
I.A.1.	Review instream flow methodologies and assess the technical adequacy of current flow recommendations.	PD	Complete	"Guru II." Center for Public-Private Sector Cooperation, 1993.						
I.A.2.	Develop recommendations for integrating geomorphology and food web studies into Recovery Program.	PD	Complete	Andrews, et al, 1996.						
I.A.3.	Evaluate CDOW's instream flow methodologies and flow recommendations for warmwater native fishes (Anderson) as they relate to flows needed for endangered fish recovery.	FWS/PD	Complete	The Biology Committee reviewed Rick Anderson's report in April 2005, raised numerous questions regarding the application of this methodology to endangered fish flow recommendations, and declined to act on the report. The Service does not support adopting Anderson's methodology as the standard methodology for making flow determinations.						
I.A.4.	Develop strategic plan for geomorphic research and monitoring.	Program	Complete	LaGory et al., 2003.						
I.A.4.a.	Develop strategy and design for studies to address geomorphic research priorities.	Geo. Work Group	Ongoing	X	X	X				
I.A.4.b.	Conduct needed geomorphic research and monitoring.	Program	Ongoing	X	X	X	X	X	X	X
I.B.	Develop and select methods for modifiable protection of instream flows in Colorado.									
I.B.1.	Develop, evaluate and select, as appropriate, options for interim protection of instream flows until uncertainty concerning habitat needs and water availability can be resolved.									
I.B.1.a.	Colorado Attorney General review.	CO	Complete	CWCB adopted the Statement of Policy and Procedure Regarding the Appropriation of Instream Flows for the Recovery of Endangered Fishes of the Upper Colorado River Basin on March 9, 1994 and S.B. 96- 064 concerning instream flow appropriations of the CWCB was passed in May '96.						
I.B.1.b.	CWCB approval/recommended action.	CWCB	Complete							
I.B.1.c.	Adopt legislation or regulation, if necessary.	CWCB	Complete							
I.B.2.	Evaluate options for allocating Colorado's compact entitlement among the five subbasins, the implications for water available to recover the endangered fishes, and implications of full protection of recovery flow recommendations on development of Colorado's compact entitlement.	CWCB	Complete	CWCB completed work on water availability study in 1995 after convening subbasin work groups. Scenarios for future development and estimates for future water use were outlined for each basin.						
I.B.3.	Assess need for retirement of senior conditional water rights.	CWCB/FWS	Dropped	Colorado law prohibits conversion of conditional water rights to instream flow water rights.						
I.C.	Develop an enforcement agreement between the Service and appropriate State agencies to protect instream flows acquired under the Recovery Program for the endangered fishes.									
>*	I.C.1. Colorado.	FWS/CWCB	Complete	Agreement with FWS concerning the enforcement and protection of fish recovery flow water rights adopted by CWCB on September 21,1993.						
I.D.	Develop tributary management plans (based in part on the tributary report, see V.F., pg. 23).									
I.D.1.	Assess need for tributary management plans on a site specific basis.	PD	Complete	2004: PD's office determined most tributaries covered by biological opinions (except White and San Rafael rivers), so this item was moved to Green River Action Plan.						
<b>II.</b>	<b>RESTORE HABITAT (HABITAT DEVELOPMENT AND MAINTENANCE)</b>									
II.A.	Restore flooded bottomland habitats.									
II.A.1.	Conduct inventory of flooded bottomland habitat for potential restoration.	FWS-FR	Complete	Inventory completed (see Irving & Burdick, 1995 as primary reference)						
II.A.2.	Screen high-priority sites for potential restoration/acquisition.	PD	Complete	Future acquisition of sites to be determined.						
II.B.	Support actions to reduce or eliminate contaminant impacts. [NOTE: Contaminants remediation (in all reaches) will be conducted independently of and funded outside of the Recovery Program]									
II.B.1.	Evaluate effects of selenium.	FWS-ES	Ongoing	X	X	X	X	X	X	X
II.B.1.a.	If needed for recovery, identify actions to reduce deleterious levels of selenium contamination.	FWS-ES	Ongoing	X	X	X	X	X	X	X
II.B.2.	Identify locations of petroleum-product pipelines and assess need for emergency shut-off valves.	FWS-ES	Ongoing	X	X					
>*	II.B.2.a. Ensure that all new petroleum product pipelines have emergency shutoff valves.	FWS-ES	Ongoing	X	X	X	X	X	X	X
II.B.3.	Review and recommend modifications to State and Federal hazardous materials spills emergency response programs.	FWS-ES	Ongoing	X	X					
II.C.	Develop an issue paper on the desirability and practicality of restoring and protecting certain portions of the floodplain for endangered fishes and evaluate the floodplain restoration program.									
II.C.1.	Identify what restoration and protection are needed by addressing: 1) biological merits of restoring the floodplain with emphasis on endangered fish recovery; 2) priority geographic areas; and 3) integration of a broader floodplain restoration initiative into the current Recovery Program floodplain restoration program.	PROGRAM	Complete	Phase 1 floodplain protection issue paper approved by Mgmt. Comm. 1/98 (Nelson 1998). Phase II (Tetra Tech 2000) and synthesis reports left in draft and highest priority work moved into Green and Colorado River floodplain management plans (Valdez and Nelson 2004a,b).						
II.C.2.	Identify how to conduct restoration and protection by addressing: 1) restoration and protection tools/approaches; 2) institutional options for floodplain restoration; 3) costs/funding strategy; and 4) implementation steps and schedule.	PD/CO/UT	Complete	Final draft floodplain issues report given to Mgmt. Comm. 2/00. Phase II (Tetra Tech 2000) and synthesis reports left in draft and highest priority work moved into Green and Colorado River floodplain management plans (Valdez and Nelson 2004a,b).						

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II.C.3.	Identify viable options and develop specific restoration strategies for selected geographic areas (e.g., Grand Valley, Green River).	PD	Complete	Final draft floodplain issues report given to Mgmt. Comm. 2/00. Phase II and synthesis reports left in draft and highest priority work moved into Green and Colorado River floodplain management plans (Valdez and Nelson 2004 a,b).							
III.	<b>REDUCE NEGATIVE IMPACTS OF NONNATIVE FISHES AND SPORTFISH MANAGEMENT ACTIVITIES (NONNATIVE AND SPORTFISH MANAGEMENT)</b>										
III.A.	Reduce negative interactions between nonnative and endangered fishes.										
III.A.1.	Where not already generally known, identify negative impacts (e.g., predation, competition, hybridization) of problem species.										
III.A.1.a.	Determine role of nonnative fishes as potential competitors with bonytails and determine size-specific vulnerability of bonytails to nonnative fish predators.	UDWR	Complete	Adler and Crowl 1995, Bissonette and Crowl 1995, Lentsch et al. 1996a.							
III.A.1.b.	Assess impact of northern pike predation on Colorado pikeminnow in the Green River.	UDWR	Complete	Crowl and Lentsch 1996.							
III.A.1.c.	Re-evaluate levels of hybridization with white sucker and assess effects on razorback sucker populations. (Program will monitor for evidence of hybridization as razorbacks increase in the system.)	FWS/STATES	TBD								
>*	III.A.1.c.(1) If necessary, implement actions to minimize hybridization between white sucker and razorback sucker	FWS/STATES	TBD								
III.A.2.	Identify and implement viable active control measures.										
III.A.2.a.	Identify options (including selective removal) to reduce negative impacts of problem species and assess regulations and options (including harvest) to reduce negative impacts on native fishes from nonnative sportfish.	PD	Complete	Hawkins and Nesler 1991; Lentsch et al. 1996b; Tyus and Saunders 1996.							
III.A.2.b.	Review options and develop agreement with appropriate States on strategies and locations for implementing control options.	FWS/STATES	Complete								
>*	III.A.2.c. Evaluate the effectiveness (e.g., nonnative and native fish response) and develop and implement an integrated, viable active control program.	PD/FWS/STATES	Ongoing	X	X	X	X	X	X	X	
III.A.2.c.(1)	Synthesize data on each species/river nonnative fish control effort and concomitant native fish response (e.g., smallmouth bass in the Yampa River and native fish response in the Yampa River) (completed by PI's and identified as a task in individual scopes of work).	PI's	Ongoing		X			X		X	
III.A.2.c.(2)	Produce umbrella summary of nonnative fish control projects and native fish response on a subbasin and river level every three years.	PD	Ongoing		X			X		X	
>*	III.A.2.d. Close river reaches to angling where and when angling mortality is determined to be significant. (See specific river reaches.)	STATES	Ongoing, as needed	X	X	X	X	X	X	X	
III.A.2.e.	Increase law enforcement activity to decrease angling mortality.	STATES	Ongoing	X	X	X	X	X	X	X	
>*	III.A.2.f. Develop control program for removal of small nonnative cyprinids in backwaters and other low velocity habitats. (Trammell et al. 2002 and 2005 complete, but development and implementation of a control program is on hold.)	STATES	On hold								
III.B.	Reduce negative impacts to endangered fishes from sportfish management activities.										
III.B.1.	Implementation Committee approval of Interim Nonnative Fish Stocking Procedures	PD	Complete	IC gave proxy in January 1994; States & Service approved in spring of 1994.							
III.B.2.	Implement Interim Nonnative Fish Stocking Procedures.										
III.B.2.a.	Develop scope of work for evaluation of Interim Procedures.	PD	Complete	FY 95 SOW #62 (FWS, CO, UT, WY)							
III.B.2.b.	Evaluate and revise Interim Procedures.	PD	Complete	Procedures for Stocking Nonnative Fish Species in the Upper Colorado River Basin, USFWS 1996.							
III.B.3.	Finalize revised Nonnative Fish Stocking Procedures.										
III.B.3.a.	Complete Biological Opinion/NEPA compliance.	FWS-ES/FR	Complete	FONSI, USFWS 1996.							
III.B.3.b.	Implementation Committee approval of revised Nonnative Fish Stocking Procedures.	PD	Complete	Implementation Committee approval October 2, 1996.							
III.B.3.c.	State wildlife commissions approval, as necessary.	STATES	Complete								
III.B.3.d.	Execute memoranda of agreement between Service and States.	FWS/STATES	Complete	Cooperative agreement for implementation of procedures for stocking of nonnative fish species in the Upper Colorado River Basin. Agreement in 1996 Stocking Procedures.							
III.B.4.	Incorporate final Procedures into State aquaculture permitting process.										
>*	III.B.4.a. Colorado.	CDA/CDOW	Complete	January 1999.							
III.B.4.a.(1)	Evaluate effectiveness of Colorado's stocking regulation.	CDOW	Complete	Martinez & Nibbelink 2004.							
>*	III.B.4.b. Utah.	UDWR	Complete								
>*	III.B.4.c. Wyoming.	WYGF	Complete								
III.B.5.	Explore options for tribal acceptance of Nonnative Fish Stocking Procedures.	FWS-FR	Complete	Tribe verbally accepted Procedures (per memo from Dave Irving to Bob Muth, 2003).							
III.B.6.	Review, evaluate, and revise as needed, the Nonnative Fish Stocking Procedures.	PD/FWS/STATES	As needed								





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VII.A.5.a.	Convene Recovery Team.	FWS	Complete	1999							
VII.A.5.b.	Develop recommended recovery goals.	PD/Contract	Complete	2000							
VII.A.5.c.	Biology Committee review of recommended recovery goals.	Program	Complete	2000							
VII.A.5.d.	Finalize recovery goals.	FWS/PD	Complete	U.S. Fish and Wildlife Service 2002a, 2002b, 2002c, 2002d.							
VII.A.5.e.	Conduct species status review and update recovery goals at least every 5 years.	FWS/Program	Every 5 years		X					X	
VII.A.6.	Identify elements of conservation plans to ensure long-term management and protection following delisting.	Program	Ongoing	X	X	X	X	X	X	X	
VII.A.7.	Monitor and assess Recovery Program accomplishments annually.	PD	Annual	X	X	X	X	X	X	X	
VII.A.8.	Develop biennial work plan to address priority needs.	PD	Annual	X	X	X	X	X	X	X	
VII.B.	Actively participate in Recovery Program committees and secure funding for annual work plan and larger projects (e.g., water acquisition, capital construction, and long term operation and maintenance) in accordance with the recovery actions and milestones (Utah, Colorado, Wyoming, Bureau of Reclamation, Fish and Wildlife Service, Western Area Power Administration, Water Users, Environmental Groups, Colorado River Energy Distributors Association) and the National Park Service.	PD	Ongoing	X	X	X	X	X	X	X	
VII.B.1.	As defined in PL 106-392, prepare joint report with San Juan River RIP on the utilization of power revenues for base funding, including recommendations regarding the need for continued base funding after 2011 that may be required to fulfill the goals of the Recovery Programs. Report is due to the committees of the U.S. Senate and House of Representatives 9/30/08.	Program	Pending			X	X	X	X		
VII.C.	Manage, direct, and coordinate Recovery Program activities.	PD	Ongoing	X	X	X	X	X	X	X	
VII.C.1.	Review Information and Education program (Management Committee).	PD	Complete	Management Committee, July 28, 1994.							