

COLORADO RIVER ACTION PLAN: MAINSTEM

	ACTIVITY	WHO	STATUS	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	FY 12 10/11 9/12	OUT- YEARS
I.	PROVIDE AND PROTECT INSTREAM FLOWS (HABITAT MANAGEMENT)									
I.A.	Colorado River above Gunnison River									
>*	I.A.1. Develop, issue and implement PBO.	FWS	Complete	USFWS 1999b.						
	I.A.2. Initially identify year-round flows needed for recovery.									
	I.A.2.a. Rifle to Roller Dam.	FWS-FR	Complete	Osmundson 2001.						
	I.A.2.b. Roller Dam to 15-Mile Reach.	FWS-FR	Complete	Osmundson 2001.						
	I.A.2.c. 15-Mile Reach.	FWS-FR	Complete	Osmundson and Kaeding 1991.						
	I.A.3. Provide a depletion accounting report as outlined in the 15-Mile Reach PBO.									
	I.A.3.a. Collect data.	CWCB/FWS-ES/BR	Ongoing	X	X	X	X	X	X	X
	I.A.3.b. Develop consumptive use and losses report with CRDSS model to verify level of depletions.	CWCB	Pending	6/30/07				X	12/31/2011	
	I.A.3.c. Calculate new depletions every 5 years (2016, etc).	CWCB	Pending							X
	I.A.4. Evaluate need for instream flow water rights.									
	I.A.4.a. Rifle to Roller Dam (Dependent on initial flow recommendations).									
	I.A.4.a.(1) Assess legal and physical availability of water.	CWCB	Complete	Colorado completed work on a water availability study in early 1995 & the work was used as the basis of the allocation of compact water between the five subbasins.						
	I.A.4.a.(2) Assess compact considerations.	CWCB	Complete	Colorado completed work on a water availability study in early 1995 & the work was used as the basis of the allocation of compact water between the five subbasins						
	I.A.4.a.(3) Five-year periodic review of progress under the PBO to determine if instream flow filings are necessary.	CWCB/FWS	Ongoing	12/06				X		X
	I.A.4.a.(3)(a) If necessary, evaluate how identified flows will be legally protected.	CWCB	Ongoing	12/06				X		X
	I.A.4.b. Roller Dam to 15-Mile Reach (Dependent on initial flow recommendations).									
	I.A.4.b.(1) Assess legal and physical availability of water.	CWCB	Complete	Colorado completed work on a water availability study in early 1995 & the work was used as the basis of the allocation of compact water between the five subbasins.						
	I.A.4.b.(2) Assess compact considerations.	CWCB	Complete	Colorado completed work on a water availability study in early 1995 & the work was used as the basis of the allocation of compact water between the five subbasins.						
	I.A.4.b.(3) Five-year periodic review of progress under the PBO to determine if instream flow filings are necessary.	CWCB/FWS	Ongoing	12/06				X		X
	I.A.4.b.(3)(a) If necessary, evaluate how identified flows will be legally protected.	CWCB	Ongoing	12/06				X		X
	I.A.4.c. 15-Mile Reach.									
	I.A.4.c.(1) Instream flow water right secured - 581 cfs (July - September).		Complete	On September 2, 1997, instream flow water rights were decreed for 581 and 300 cfs to benefit endangered fishes in the 15-Mile Reach. These water rights have a priority date of the date file which is December 1992 and December 1994 respectively.						
	I.A.4.c.(2) Irrigation season return flows legally protected - 300 cfs.		Complete	On September 2, 1997, instream flow water rights were decreed for 581 and 300 cfs to benefit endangered fishes in the 15-Mile Reach. These water rights have a priority date of the date file which is December 1992 and December 1994 respectively.						
	I.A.5. Provide and legally protect instream flows pursuant to Colorado River PBO.									
>*	I.A.5.a. Pursuant to Ruedi Biological Opinion, deliver 5,000af annually & an additional 5,000af 4 out of 5 years (ongoing and protect by short-term agreement).	BR/CWCB	Ongoing	X	X	X	X	X	X	X
>*	I.A.5.b. Execute long-term lease for 10,825 af from Ruedi Reservoir.	BR/FWS/CWCB	Complete	2012 lease signed June 23, 2003.						
>*	I.A.5.b.(1) Provide water annually pursuant to long-term lease.	BR/CWCB	Ongoing	X	X	X	X	X	X	X
	I.A.5.c. Execute 10-year agreement for delivery of 5,412.5 af by West Slope water users.	CRWCD/FWS	Complete	Pursuant to the 1999 PBO, in 2000, the Service signed a 10-year agreement with the CRWCD for delivery of 5,412 acre-feet of West Slope water from Wolford Mountain Reservoir (in addition to the original commitment of 6,000 acre-feet).						
>*	I.A.5.c.(1) Provide and protect water deliveries by West Slope water users. To provide water when not available from Wolford due to shortage criteria, Reclamation will provide a backup contract for 5,000 af. from Ruedi Reservoir (by 10/06)	CRWCD/CWCB	Ongoing	7/31/07	X	X	X	X	X	X
	I.A.5.d. Execute 10-year agreement for delivery of 5,412.5 af by East Slope water users.	DWD/FWS	Complete	Pursuant to the 1999 PBO, in 2000, the Service signed a 10-year agreement with Denver Water to deliver of 5,412 acre-feet of East Slope water from Williams Fork Reservoir.						
>*	I.A.5.d.(1) Provide and protect water deliveries by East Slope water users.	DWD/CWCB	Ongoing	X	X	X	X	X	X	X
	I.A.5.e. Permanent delivery of 10,825 af of water in late summer/early fall to meet base flow needs.									
	I.A.5.e.(1) Identify options.	CRWCD/NWCD/ Denver Water	Draft	Denver Water and Colorado River Water Conservation District 2002.						
	I.A.5.e.(2) Select preferred alternative for delivery.	CRWCD/NWCD/ Denver Water	Ongoing	X	X					

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I.A.5.e.(3)	Sign agreement(s)	CRWCD/ NWCD/ Denver Water	Pending			X				
I.A.5.e.(4)	Develop projects, if needed.	CRWCD/ NWCD/ Denver Water	Pending				X	X	X	X
>* I.A.5.e.(5)	Deliver and legally protect flows.	CRWCD/ NWCD/ Denver Water	Pending							X
I.A.5.f.	Evaluate options for use of uncommitted Ruedi Reservoir water following Round II sales.	BR	Complete	On May 25, 1995, FWS issued final amendment to BO for Round II water sales. Reclamation agreed to implement a 15-year contract for 21,650 af (in addition to the original 5,000 af + 5,000 af four out of five years). USFWS 1995.						
I.A.5.g.	After Ruedi Round II water sales are completed, or commitments to contracts agreed to, resolve the disposition of remaining uncommitted water from Ruedi Reservoir.	BR/CWCB/ FWS	Complete	1999 amendment to 1995 Ruedi BO. USFWS 1999a.						
>* I.A.5.h.	Pursuant to Wolford Mountain (Muddy Creek) Biological Opinion, deliver up to 6,000 acre-feet of water.	CRWCD/FWS/ CWCB	Ongoing	X	X	X	X	X	X	X
I.A.5.i.	Coordinated reservoir operations.									
I.A.5.i.(1)	Evaluate (final report). Implementation plan finalized 2/28/06.	BR	Complete	Identified as complete in 2000 version of RIPRAP.						
>* I.A.5.i.(2)	If available, deliver additional peak flows, evaluate process & hydrology, and provide annual report.	BR	Ongoing	X	X	X	X	X	X	X
I.A.5.j.	Collbran Project.									
I.A.5.j.(1)	Evaluate.	BR	Complete	Collbran contract could not be implemented as planned due to a number of water rights issues.						
I.A.5.j.(2)	Make recommendations	BR	Complete							
I.A.5.k.	Silt Project.									
I.A.5.k.(1)	Evaluate.	BR	Complete	Not feasible due to water availability.						
I.A.5.k.(2)	Make recommendations.	CDOP/BR	Complete							
I.A.5.l.	Grand Valley Water Management Project.									
I.A.5.l.(1)	Evaluate.	BR	Complete	1996						
I.A.5.l.(2)	Complete Draft Grand Valley Water Management Environmental Assessment. The agreement to deliver Green Mountain Reservoir water to the Grand Valley Power Plant, pursuant to the Orchard Mesa Check Settlement, will also be covered in this draft environmental assessment.	BR	Complete	1997						
>* I.A.5.l.(3)	Design and construct features of the Grand Valley Water Management Project.	BR	Complete							
I.A.5.l.(4)	Execute agreement for delivery of surplus Green Mountain Reservoir water up to the excess capacity of the Grand Valley Power Plant pursuant to the Orchard Mesa Check Settlement.	BR	Complete	July 1999.						
I.A.5.l.(5)	Execute agreement (municipal water contract) to deliver additional Orchard Mesa Check Settlement water and Grand Valley Water Management Plan water to benefit endangered fish.	BR/City of Grand Jct.	Complete; needs renewal	In 2000, Reclamation entered a 5-year contract to deliver Green Mountain surplus water to the city of Grand Junction for municipal/recreational purposes. Needs to be renewed in 2006						
I.A.5.l.(6)	Assess options and legally protect only additional Orchard Mesa Check Settlement water and Grand Valley Water Management Plan water.	BR	Complete	1999						
I.A.5.m.	Water Division 5 Coordinated Facilities Study.									
I.A.5.m.(1)	Evaluate options for providing and protecting additional peak flows to the 15-Mile Reach.	CWCB	Complete	Brown and Caldwell 2003.						
>* I.A.5.m.(2)	Deliver additional peak flows as determined feasible in the evaluation.	TBD	Ongoing	X	X	X	X	X	X	X
I.A.6.	Review implementation of RIPRAP items to determine timely compliance with applicable schedules (every 2 yrs. Beginning in 2003).	FWS	Ongoing	X		X		X	X	X
I.B.	Colorado River from the Gunnison to the Colorado-Utah State line (Includes the 18-Mile Reach (Flow recommendation needed; expected with completion of Aspinall Unit biological opinion.)									
I.B.1.	Initially identify year-round flows needed for recovery.	FWS-FR	Complete	McAda 2003.						
I.B.2.	Evaluate how identified flows will be legally protected.	CWCB	On hold							
I.B.3.	State acceptance of initial flow recommendations.									
I.B.3.a.	Review scientific basis, dependent on development of flow recommendations by FWS.	CWCB/CDOW	Pending							
I.B.3.b.	Assess legal and physical availability of water.	CWCB	Complete	Colorado completed work on a water availability study in early 1995 & the work was used as the basis of the allocation of compact water between the five subbasins.						
I.B.3.c.	Assess compact considerations.	CWCB	Complete	Colorado completed work on a water availability study in early 1995 & the work was used as the basis of the allocation of compact water between the five subbasins.						
I.B.3.d.	CWCB notice of intent to appropriate (in Colorado).	CWCB	On hold							
I.B.4.	Legally protect identified flows.									
>* I.B.4.a.	Acquire (see Colorado River above Gunnison and Gunnison River).									
I.B.4.b.	Appropriate.									

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	I.B.4.b.(1) CWCB approval to appropriate.	CWCB	On hold							
>*	I.B.4.b.(2) Colorado Attorney Generals Office file date.	CWCB	On hold							
>*	I.B.4.b.(3) Water court adjudication (litigation dependent).	CWCB	On hold							
	I.B.4.c. Deliver and legally protect flows from Aspinall (see Colorado River above Gunnison and Gunnison River).									
>*	I.B.4.c.(1) Operate Aspinall to provide test flows.	BR	Complete	Test flows provided through 1997; synthesis report and flow recommendations report completed in 2003 (McAda 2003).						
>*	I.B.4.c.(2) Continue annual coordination (meeting 3 times/year) of Aspinall operation until biological opinion complete.	BR	Ongoing	X	X	X	X	X	X	X
	I.B.4.c.(3) Operate Aspinall to provide flows pursuant to biological opinion.									
	I.B.4.c.(3)(a) Determine if change in water right and/or contract is needed.	BR	Pending							
	I.B.4.c.(3)(b) Enter into contract if needed.	BR	Pending							
>*	I.B.4.c.(3)(c) Deliver flows.	BR	Pending							
	I.C. Colorado River from Colorado-Utah State line to Green River (Flow recommendations needed.)									
	I.C.1. Initially identify year-round flows needed for recovery.	FWS-FR	Complete	McAda 2003.						
	I.C.2. State acceptance of initial flow recommendations.									
	I.C.2.a. Review scientific basis.	UT	Pending							
	I.C.2.b. Assess legal and physical availability of water.	UT	Pending							
	I.C.3. Legally protect identified flows.									
	I.C.3.a. Hold public meeting to establish future appropriation policy.	UT	Pending							
	I.C.3.b. Adopt and implement new policy (new appropriations subject to flow criteria).	UT	Pending							
>*	I.C.3.c. Prepare and execute contracts with water users as required to subordinate diversions associated with approved and/or perfected rights.	UT	Pending							
	I.D. Colorado River below Green River									
	I.D.1. Initially identify year-round flows needed for recovery.	FWS	Pending							
	I.D.2. Assess adequacy of combined flows from Colorado and Green rivers to provide fish habitat (and meet recovery goals) in the Cataract Canyon reach of the Colorado River.	FWS	Pending							
	I.E. Evaluate and revise as needed flow regimes to benefit endangered fish populations.	FWS/Program	Ongoing	X	X	X	X	X	X	X
	II. RESTORE HABITAT (HABITAT DEVELOPMENT AND MAINTENANCE)									
	II.A. Restore and manage flooded bottomland habitat.									
	II.A.1. 29-5/8 Road Gravel Pit (became part of larger "Hot Spot Complex" in 2003.)									
	II.A.1.a. Develop and approve management plans.	FWS-FR	Complete	Burdick 1994.						
	II.A.1.b. Site design/complete environmental compliance.	BR	Complete	Levee initially breached in December 1995. To enhance post-runoff drainability, site topography was re-contoured in March 1998.						
>*	II.A.1.c. Construct.	BR	Complete							
>*	II.A.1.d. Operate and maintain.	BR	TBD, revisit as needed	Burdick 2002. Operation, maintenance and evaluation of sites incorporated into Colorado River Subbasin Floodplain Management Plan (Valdez and Nelson 2004b) (IIA6).						
	II.A.1.e. Monitor and evaluate success; modify as needed.	FWS-FR	TBD, revisit as needed							
	II.A.2. Adobe Creek.									
	II.A.2.a. Develop and approve management plans.	FWS-FR	Complete	Earthen dikes and water control structures completed in spring 1995.						
	II.A.2.b. Site design/complete environmental compliance.	BR	Complete							
>*	II.A.2.c. Construct.	BR	Complete							
>*	II.A.2.d. Operate and maintain.	BR	TBD, revisit as needed	Hamilton et al. 1996, 1997, 2003. Operation, maintenance and evaluation of sites incorporated into Colorado River Subbasin Floodplain Management Plan (Valdez and Nelson 2004b) (IIA6).						
	II.A.2.e. Monitor and evaluate success; modify as needed.	FWS-FR	TBD, revisit as needed							
	II.A.3. Walter Walker.									
	II.A.3.a. Develop and approve management plans.	FWS-FR	Complete	1994						
	II.A.3.b. Site design/complete environmental compliance.	BR	Complete	Initial construction was completed during FY 95.						
>*	II.A.3.c. Construct.	BR	Complete	75 cfs inlet control structure to flush selenium was completed December 1996 (Hamilton et al 2003).						

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>*	II.A.3.d. Operate and maintain.	BR/FWS/ CDOW	TBD, revisit as needed	Operation, maintenance and evaluation of sites incorporated into Colorado River Subbasin Floodplain Management Plan (Valdez and Nelson 2004b) (IIA6).							
	II.A.3.e. Monitor and evaluate success; modify as needed.	FWS-FR	TBD, revisit as needed	Hamilton et al. 1996, 1997, 2003, Scheer 1998.							
	II.A.4. Develop and implement levee removal strategy at high-priority sites.										
	II.A.4.a. Preconstruction (contaminants screening, floodability assessments, environmental compliance, design & engineering.	BR/FWS	Complete	Burdick 2002. Levees breached at two sites (19.5 acres total). Levee removal completed and operation, maintenance and evaluation of sites incorporated into Colorado River Subbasin Floodplain Management Plan (Valdez and Nelson 2004b) (IIA6).							
>*	II.A.4.b. Construction (levee breaching) [NOTE: Subject to review and approval for depression wetlands.]	BR	Complete								
>*	II.A.4.c. Operate and maintain.	BR/FWS	Complete								
	II.A.4.d. Evaluation	FWS	Complete								
	II.A.5. Acquire interest in high-priority flooded bottomland habitats.										
	II.A.5.a. Identify and evaluate sites.	FWS	Complete	Acquired 10 sites (394 acres total). Operation, maintenance and evaluation of sites incorporated into Colorado River Subbasin Floodplain Management Plan (Valdez and Nelson 2004b) (IIA6).							
	II.A.5.b. Pre-acquisition planning and identification of acquisition options.	PD	Complete								
	II.A.5.c. Conduct appraisal/NEPA compliance.	PD	Complete								
>*	II.A.5.d. Negotiate and acquire.	PD	Complete								
	II.A.5.e. Evaluate effectiveness of land acquisition activities and provide recommendations	PD	Complete								
>*	II.A.6. Develop and implement Colorado River Subbasin Floodplain Management Plan (Valdez and Nelson 2004b).	Program	Ongoing	X	X	X	X	X	X	X	
	II.A.6.a. Validate and refine Colorado River Subbasin Floodplain Management Plan	Program	Ongoing	X	X	X	X	X	X	X	
	II.B. Restore native fish passage at instream barriers.										
	II.B.1. Restore passage at Grand Valley Irrigation Co. Diversion Dam (Palisade)										
	II.B.1.a. Evaluate and implement viable options to restore fish passage.	BR/FWS	Complete	1997							
	II.B.1.a.(1) Obtain landowner consent/agreement.	BR	Complete	Preconstruction activities complete 1997.							
	II.B.1.a.(2) Site design/environmental compliance.	BR	Complete	Preconstruction activities complete 1997.							
>*	II.B.1.a.(3) Construct.	BR	Complete	GVIC passage construction completed in 01/98.							
>*	II.B.1.a.(4) Operate and maintain.	FWS-FR/BR	Ongoing	X	X	X	X	X	X	X	
	II.B.1.a.(5) Monitor and evaluate success.	FWS-FR/BR	Complete	Burdick 1999.							
	II.B.1.b. Screen GVIC diversion to prevent endangered fish entrainment, if warranted.										
	II.B.1.b.(1) Design.	BR	Complete	1999							
>*	II.B.1.b.(2) Construct.	BR	Complete	GVIC diversion canal fish screen completed in 05/02, modifications completed March 2004.							
>*	II.B.1.b(3) Operate and maintain.	FWS-FR/BR	Ongoing	X	X	X	X	X	X	X	
	II.B.2. Restore fish passage at Price Stubb.										
	II.B.2.a. Evaluate and implement viable options.										
	II.B.2.a.(1) Obtain landowner consent/agreement.	BR	Complete								
	II.B.2.a.(2) Site design/environmental compliance.	BR	Complete								
>*	II.B.2.a.(3) Construct.	BR	Pending	X	X						
>*	II.B.2.a.(4) Operate and maintain.	TBD	Pending		X	X	X	X	X	X	
	II.B.2.a.(5) Monitor and evaluate success.	FWS-FR/BR	Pending		X	X					
	II.B.3. Restore fish passage at Government Highline (Roller Dam).										
	II.B.3.a. Evaluate and implement viable options.										
	II.B.3.a.(1) Site design/environmental compliance.	BR	Complete	2003							
>*	II.B.3.a.(2) Construct.	BR	Complete								
>*	II.B.3.a.(3) Operate and maintain.	BR	Ongoing	X	X	X	X	X	X	X	
	II.B.3.a.(4) Monitor and evaluate success.	FWS-FR/BR	Ongoing	X	X	X					
	II.B.3.b. Screen Government Highline diversion to prevent endangered fish entrainment										
	II.B.3.b.(1) Design.	BR	Complete	2002							
>*	II.B.3.b.(2) Construct.	BR	Complete	August 2005.							
	II.B.3.b.(3) Evaluate screening.	FWS-FR/BR	Ongoing	X							
	II.C. 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.C.1. Support actions to reduce or eliminate contaminant impacts of selenium in the Grand Valley.	FWS-ES	Ongoing	X	X	X	X	X	X	X	
	II.C.2. Support remediation of groundwater contamination at the Atlas Mill tailings site.	FWS-ES	Ongoing	X	X	X	X	X	X	X	
	II.C.3. Identify measures to minimize risk of hazardous materials spills in Black Rocks and Westwater Canyon from transport along the adjacent railway to protect humpback chub populations.	FWS-ES	Ongoing	X	X	X	X	X	X	X	

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III.	REDUCE NEGATIVE IMPACTS OF NONNATIVE FISHES AND SPORTFISH MANAGEMENT ACTIVITIES (NONNATIVE AND SPORTFISH MANAGEMENT)									
III.A.	Develop and implement control programs in reaches of the Colorado River occupied by endangered fishes. Each control activity will be evaluated for effectiveness and then continued as needed. See III.A.2.c.1.& 2. under General Recovery Program Support Action Plan.									
III.A.1.	Determine relationship between Aspinall test flows and nonnative fish abundance.	UDWR/ FWS-FR	Complete	McAda & Ryel 1999.						
>*	III.A.2. Reclaim ponds in critical habitat.	CDOW	Complete	Martinez 2004.						
	III.A.2.a. Evaluate and make recommendations.	CDOW	Complete							
	III.A.3. Nonnative cyprinids and centrarchids in nursery habitats.									
	III.A.3.a. Remove small nonnative cyprinids from backwaters and other low velocity habitats.	CDOW/UDWR	Complete	Trammell et al. 2002. Report completed; development and implementation of control program on hold.						
	III.A.3.b. Remove nonnative centrarchids from backwaters and other low velocity habitats.	FWS	Complete	Osmundson 2003. Report completed; development and implementation of control program on hold.						
	III.A.4. Preclude escapement from ponds in critical habitat as needed and feasible.									
	III.A.4.a. Evaluate sources of nonnative fishes and make recommendations.	CDOW/FWS	Ongoing	X						
>*	III.A.5. Develop and implement program to identify required level of channel catfish control.	FWS	On hold	Smallmouth bass considered higher priority (2004).						
>*	III.A.6. Develop and implement program to identify required level of smallmouth bass control.	FWS	Ongoing	X	X	X	X	X	X	X
	III.B. Reduce negative impacts to endangered fishes from sportfish management activities.									
>*	III.B.1. Evaluate control options and implement measures to control nonnative fish escapement from Highline Reservoir.	CDOW/ CRWCD	Complete	Fish barrier net installed in Highline Reservoir 8/99; replaced in 2005.						
	III.B.1.a. Operate and maintain Highline Reservoir net.	CDOPR	Ongoing	X	X	X	X	X	X	X
	III.B.1.b. Evaluate Highline Reservoir net.	CDOW	Complete	Martinez 2002.						
	III.B.2. Remove bag and possession limits on warmwater nonnative sportfishes within critical habitat in Colorado.	CDOW	Complete	See Colorado fishing regulations.						
	III.B.4. Develop basinwide aquatic management plan to reduce nonnative fish impacts while providing sportfishing opportunities.	CDOW	Complete	CDOW 2003a.						
>*	III.B.4.a. Implement CDOW's Colorado River Aquatic Management Plan.	CDOW	Ongoing	X	X	X	X	X	X	X
IV.	MANAGE GENETIC INTEGRITY AND AUGMENT OR RESTORE POPULATIONS (STOCKING ENDANGERED FISHES)									
IV.A.	Augment or restore populations as needed, and as guided by the Genetics Management Plan.									
IV.A.1.	Razorback sucker.									
	IV.A.1.a. Develop experimental augmentation plan and seek Program acceptance.	FWS-FR	Complete	Burdick et al. 1995.						
	IV.A.1.b. Implement experimental augmentation plan.									
>	IV.A.1.b.(1) Stock fish.	FWS-FR	Complete	Burdick 2003.						
	IV.A.1.b.(2) Monitor and evaluate results; make recommendations regarding further augmentation.	FWS-FR	Complete	Burdick 2003.						
	IV.A.2. Monitor the fish community in the upper Colorado River (above Palisade) and develop management action plan, including recommendations for Colorado pikeminnow and razorback sucker augmentation.	CDOW	Complete	Anderson 1997.						
	IV.A.3. Develop integrated stocking plan for razorbacks in the Colorado River in Colorado.	CDOW/PD	Complete	Nesler et al. 2003.						
	IV.A.3.a. Program acceptance.	CDOW/PD	Complete	Nesler et al. 2003.						
>	IV.A.3.b. Implement razorback sucker integrated stocking plan.	CDOW/PD	Ongoing	X	X	X	X	X	X	X
	IV.A.3.b. Evaluate stocking success as identified in monitoring plan for stocked fish.	Program	Ongoing	X	X	X	X	X	X	X
	IV.A.4. Develop integrated stocking plan for Colorado pikeminnow in the Colorado River in Colorado	CDOW/PD	Complete	Nesler et al. 2003.						
	IV.A.4.a. Program acceptance.	CDOW/PD	Complete	Nesler et al. 2003.						
>	IV.A.4.b. Implement Colorado pikeminnow integrated stocking plan.	CDOW/PD	On hold	X	X	X	X	X	X	X
	IV.A.4.c. Evaluate stocking success as identified in monitoring plan for stocked fish.	Program	Ongoing	X	X	X	X	X	X	X
	IV.A.5. Develop integrated stocking plan for bonytail in the Colorado River from Palisade to Loma	CDOW	Complete	Nesler et al. 2003.						
	IV.A.5.a. Program acceptance.	CDOW/PD	Complete	Nesler et al. 2003.						
>	IV.A.5.b. Implement bonytail integrated stocking plan.	FWS/CDOW	Ongoing	X	X	X	X	X	X	X
	IV.A.5.c. Evaluate stocking success as identified in monitoring plan for stocked fish.	Program	Ongoing	X	X	X	X	X	X	X
	IV.A.6. Develop integrated stocking plan for the four endangered fish in the Colorado River in Utah.									
	IV.A.6.a. Prepare plan.	UDWR	Complete	Nesler et al. 2003.						
	IV.A.6.b. Program acceptance.	UDWR	Complete	Nesler et al. 2003.						
>	IV.A.6.c. Implement plan.	UDWR	Ongoing	X	X	X	X	X	X	X
	IV.A.6.d. Evaluate stocking success as identified in monitoring plan for stocked fish.	LFL/FWS/ STATES	Ongoing	X	X	X	X	X	X	X

COLORADO RIVER ACTION PLAN: MAINSTEM

	ACTIVITY	WHO	STATUS	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	FY 12 10/11 9/12	OUT- YEARS
V.	MONITOR POPULATIONS AND HABITAT AND CONDUCT RESEARCH TO SUPPORT RECOVERY ACTIONS (RESEARCH, MONITORING, AND DATA MANAGEMENT)									
V.A.	Conduct research to acquire life history information and enhance scientific techniques required to complete recovery actions.									
V.A.1.	Determine Colorado pikeminnow larval drift into Lake Powell.	NPS	Complete	Muth and Wick 1996, 1997.						
V.B.	Monitor populations per requirements in the 15-Mile Reach PBO.									
V.B.1.	Determine initial baselines and indices for Colorado pikeminnow and humpback chub.	PD	Complete	Appendix to biological opinion (USFWS 1999a) and recovery goals (USFWS 2002a, 2002c).						
V.B.1.a.	Evaluate population response, per 15-Mile Reach PBO (every 5 years beginning in FY 05).	FWS	Ongoing	X	X	X	X	X	X	X
V.B.2.	Determine initial baselines and indices for razorback sucker and bonytail.	PD	Complete	See recovery goals, USFWS 2002b, 2002d.						
V.B.2.a.	Evaluate population response, per 15-Mile Reach PBO (every 5 years beginning in FY 05).	FWS	Ongoing	X	X	X	X	X	X	X
V.B.3.	Revise population indices to conform to recovery goals.	FWS	Complete	2003 PBO evaluation (in concert with 2003 RIPRAP assessment).						
V.B.4.	Monitor incidental take.									
V.B.4.a.	Develop plan to monitor incidental take of endangered fishes in diversion structures.	FWS	Complete	"Plan" completed in that fish are being retrieved from canals until the canals are screened and screens are fully functional (anticipated in FY 05). Screens will prevent entrainment of adult, subadult, and juvenile fish (preventing entrainment of adult and subadult fish required is by recovery goals) because they are 3/32 mesh.						
V.B.4.b.	Implement plan to monitor incidental take of endangered fish in diversion structures.	FWS	Ongoing							
V.C.	Estimate humpback chub populations. (Sampling occurs in September and October, overlapping fiscal years.)									
V.C.1.	Black Rocks. See McAda 2002.	FWS	Ongoing	X	X			X	X	X
V.C.2.	Westwater. See Hudson and Jackson 2003.	UDWR	Ongoing	X	X			X	X	X
V.C.3.	Cataract Canyon	UDWR/Valdez	Ongoing	X	X			X	X	X
V.D.	Estimate pikeminnow populations in the upper Colorado River (including Gunnison River). Three years sampling (e.g., FY 03, 04, 05) followed by two years no sampling; data analysis and report write-up in first year of no sampling (e.g., FY 06).	FWS	Ongoing		X	X	X			X