Water Supply

The Missouri River and its mainstem lakes are a source of water for municipal water supply; irrigation; cooling water; and commercial, industrial, and domestic uses. Approximately 1,600 water intakes of widely varying size are located on the Mainstem Reservoir System and the Lower River. Access to water is a key concern because low water levels increase the cost of getting water from the lakes or river. Twenty-five coal-fired and nuclear powerplants with a combined generating capacity of 15,084 MW draw cooling water from the Mainstem Reservoir System and the Lower River. The flow in the river and the river's water temperature affect a powerplant's ability to operate within water quality standards for discharges to the river. Low flows in the river may, therefore, force cutbacks in power production.

Water supply benefits for the intake facilities along the Mainstem Reservoir System and the Lower River were determined for all lakes and river reaches from the headwaters to the mouth. In addition to the intake of water, benefits associated with potential reductions in powerplant generation when river flows are lower were computed.

Figure 13 presents Missouri River water supply benefits in millions of dollars per year for each alternative. The alternatives have both greater and lesser average annual benefits than the CWCP. GP1528, the potential starting point for the GP options, has the highest benefits, while GP1521 and GP2021 have the lowest benefits. Benefits decrease as lower summer flows (Gavins Point Dam releases) result in reduced generation at Lower River powerplants.

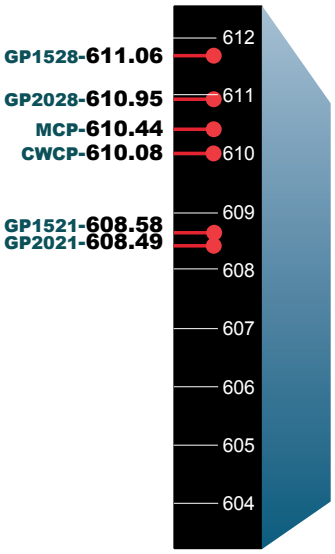


Figure 13. Average Annual Water Supply Benefits for the Alternatives ($ millions)

Recreation

The six large lakes of the Mainstem Reservoir System, the reaches of the Missouri River between the lakes, and the Lower River provide considerable recreation opportunities to residents of the States through which the river flows, as well as to neighboring States. These opportunities include boating, fishing, hunting, camping, sightseeing, and swimming. Sport fishing is a major source of recreation along the entire Mainstem Reservoir System. The wetlands along the river corridor provide waterfowl habitat, and waterfowl hunting is popular.

Water levels are a key factor in recreational use of the lakes and river reaches. At low lake levels, some boat ramps are unusable and recreational areas at the upper ends of the lakes may not provide access to the lakes. Low river flows affect boat access and maneuverability. Certain kinds of fishing and hunting depend upon adequate lake levels and river flow. Visitors are also less likely to frequent lakes and river reaches at low water for aesthetic reasons. In the 1987 to 1993 drought, there was reduced access, and many lake recreational areas were closed. Many boat ramps had to be extended and facilities had to be improved at open recreation sites to minimize overcrowding. Overall, the quality of recreation at the mainstem lakes suffered.

Recreation benefits are presented in millions of dollars per year. **Figure 14** presents the benefits for each alternative. Overall, inclusion of more stringent drought conservation measures increases recreation benefits. Higher recreation benefits at the upper three lakes largely account for the increase. For the alternatives, benefits decrease as summer flows decrease, with the GP2021 option having the lowest value. Reduced benefits to Lower River recreation largely account for the decrease.

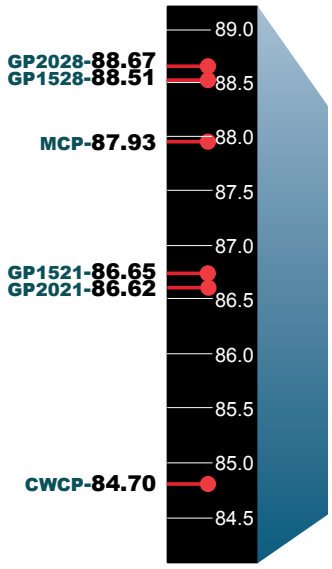


Figure 14. Average Annual Recreation Benefits for the Alternatives ($ millions)

Fish

Currently, 156 fish species are known to occur in the Missouri River and Mainstem Reservoir System. These include native species and many that have been introduced over the years. The native river fish have declined because of migration obstruction, loss of habitat, change in habitat, and competition from new species. One native species, the pallid sturgeon, is listed as an endangered species protected under the ESA. A diverse community of coldwater, coolwater, and warmwater fish inhabit the six lakes of the Mainstem Reservoir System. The upper three lakes have been stocked with coldwater game and forage species to take advantage of the coldwater retained through the summer and fall in the deeper waters of the lakes.

The success of the fish in the Mainstem Reservoir System and the Lower River depends on habitat conditions. Water levels, inflow, and outflow are important factors in the lakes. In the upper three lakes, low water levels in droughts limit coldwater fish habitat and shallow spawning and rearing habitat of warmwater and coolwater species. In the lower three lakes, high inflow and outflow reduce lake productivity and cause young fish to be flushed from the lakes. Native fish in the river reaches are naturally adapted to the high, warm, and muddy spring and early summer flows, and the lower late summer and fall flows characteristic of the historic Missouri River. Cold, clear tailwaters of the upper three dams are more conducive to trout and salmon, but not the native paddlefish, pallid sturgeon, and others.

Effects of alternatives to fisheries were initially accomplished using five models. These models predict young fish production in all six lakes, coldwater fish habitat in four lakes, coldwater fish habitat in two river reaches, warmwater fish habitat in three river reaches, and physical habitat for native river fish in nine river reaches. During formal ESA consultation, three more models for native river fish were developed that look in more detail at factors addressed in the physical habitat model – connectivity of the river to adjacent, low-lying lands; amount of shallow water habitat; and spawning cue.

Lake Fish

Young-of-Year Fish Production

Index values for total young-of-year fish production in the lakes are a combination of young-of-year fish production computed for each year and the relative value of indices for each lake. Larger lakes have larger indices and smaller lakes have smaller indices. **Figure 15** presents total relative index values for young-of-year fish production in all six of the mainstem lakes for the four GP options, the CWCP, and the MCP. Young-of-year fish production values are lowest for the CWCP. Inclusion of the unbalancing of the upper three lakes and greater drought conservation measures would benefit young-of-year fish production. The GP options all have higher average annual values than the MCP, with GP1528, the potential starting point option, having the highest value.

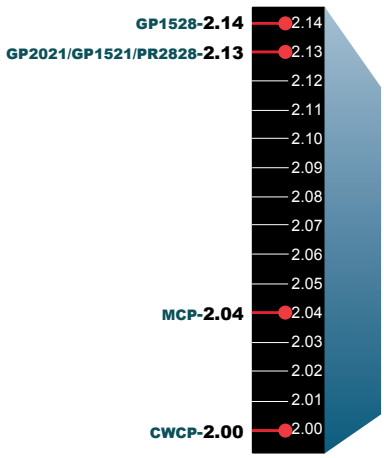


Figure 15. Average Annual Young Fish Production Index Values for the Alternatives

Coldwater Fish Habitat in the Lakes

The minimum volume of coldwater fish habitat available from July through October in the upper three lakes and Lake Francis Case was estimated for each year. **Figure 16** presents total coldwater fish habitat in MAF for each alternative. Coldwater habitat values for all of the alternatives are greater than for the CWCP. Inclusion of the Gavins Point Dam release changes improves total average annual coldwater fish habitat in the lakes, with GP1521 having the highest value.

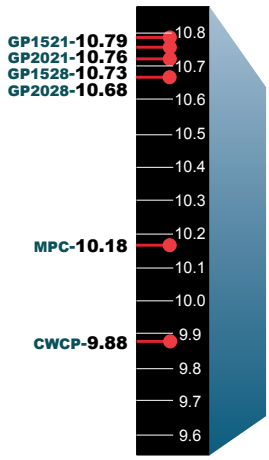


Figure 16. Average Annual Coldwater Fish Habitat in Mainstem Lakes for the Alternatives (MAF)

River Fish

Coldwater and Warmwater Fish Habitat in the River

Coldwater fish habitat in river reaches was estimated for the river reaches downstream from Fort Peck and Garrison Dams. The habitat value selected for this resource was the minimum value computed for the months of April through September of each year. The amount of water released from the upstream dam and the water temperature and dissolved oxygen levels were the factors used to determine the amount of habitat. **Figure 17** presents coldwater river fish habitat values in total miles for each of the alternatives. The CWCP has the lowest value of any of the alternatives. This is a direct result of the alternatives having more coldwater habitat in the upstream two lakes because of the inclusion of greater drought conservation measures in these alternatives. The inclusion of the spring rise releases from Gavins Point Dam further increases values, with GP2028 having the highest total average annual value.

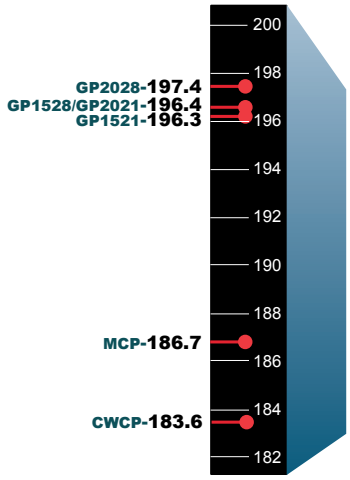


Figure 17. Average Annual Coldwater Fish Habitat in River Reaches for the Alternatives (miles)

The number of miles of warmwater river fish habitat downstream from Fort Peck, Garrison, and Fort Randall Dams in April through August was also modeled. In general, the amount of warmwater river habitat is lower for an alternative that has higher amounts of water in storage, which is the opposite of the effects expected for fish requiring coldwater habitat. **Figure 18** presents warmwater river fish habitat values in miles. The CWCP, which has the lower drought conservation measures, has the highest value of any of the alternatives. Inclusion of the Gavins Point Dam flow changes further reduces the miles of warmwater river fish habitat, with GP1521 and GP2028 having the lowest value.

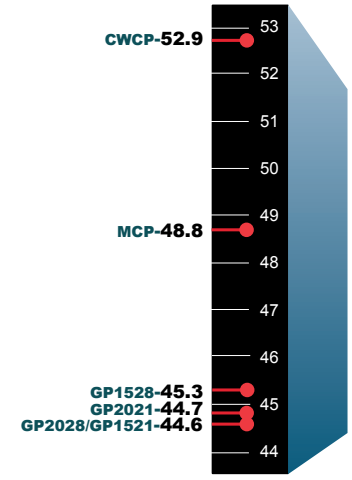


Figure 18. Average Annual Warmwater Fish Habitat in River Reaches for the Alternatives (miles)

Physical Habitat for Native Fish

Physical habitat values for native river fish were computed for river reaches downstream from four of the dams and for five reaches of the Lower River downstream from Sioux City. An index value was computed for each month based on comparisons of the velocity distribution across the channel under the flow conditions for each of the alternatives, and velocity values that existed under natural flow conditions and pre-system channel cross sections. In April, May, and June the habitat value is dependent on the potential for overbank flooding in each reach. The total value is the sum of the value for all 12 months in a year. The CWCP has the lowest value. As shown in **Figure 5,** unbalancing the storage in the upper three lakes improves the value slightly, as demonstrated by the MCP alternative. Inclusion of Gavins Point Dam flow changes increases the value even further, with GP2028 having the highest average annual value. A seventh alternative, referred to as the run-of-river (ROR) alternative, is included on **Figure 19** to show how little is gained for native river fish physical habitat with the MCP or GP options. The ROR alternative was run assuming run-of-river conditions. Under these conditions, the six lakes would be filled to the base of flood control storage and there would be no control over the inflows entering the lakes.

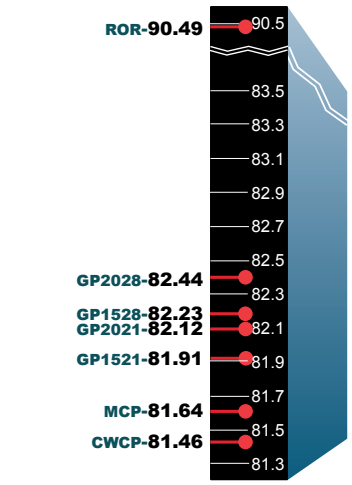


Figure 19. Average Annual Native River Fish Physical Habitat Index Values for the Alternatives

Floodplain Connectivity

Annual overbank flooding does not occur with any of the alternatives except the ROR alternative. A model was developed to see if there were noticeable differences in how much inundation occurs to the lower-lying lands along the Lower River downstream from Sioux City, such as those around the oxbow lakes along the river. The result of the modeling of connectivity of the river to these low-lying lands is depicted in **Figure 20.** This figure shows the results for the assumption that 2 days of inundation are required; however, the results for more days in the spring just shift all of the curves to the left. There is relatively little gain in connectivity to these lands, especially when compared to the acreage the ROR alternative would attain.

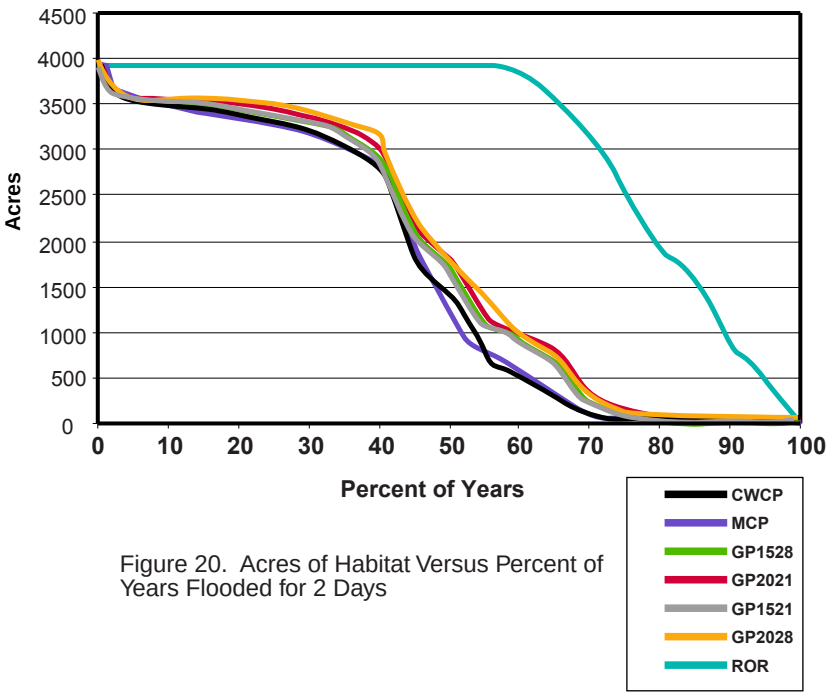


Figure 20. Acres of Habitat Versus Percent of Years Flooded for 2 Days

Shallow Water Habitat

Shallow water habitat requirements include those areas with water depths less than 5 feet flowing at no more than 2 feet per second. The Corps and USFWS agree that 20 to 30 acres per mile of this habitat are needed to preclude jeopardy to the endangered pallid sturgeon. A model was developed to compute the acres per mile of shallow water habitat using data from cross-sections in a representative subreach for each of six Lower River reaches. Average annual values of shallow water habitat were computed from the model's annual data and are presented in **Figure 21**. The amount of habitat varies with location, with the reach immediately downstream from Gavins Point Dam having more than the required amount of habitat. The amount of shallow water habitat is reduced dramatically at the start of the channelized reach just upstream from Sioux City. Shallow water habitat generally increases in a downstream direction from Sioux City. Even though a change in operation from any of the GP options would increase the habitat, it would fall far short of the minimum required 20 acres per mile in many of the reaches. The lowest reach, Boonville, has habitat values very close to the 20 acres per mile that are relatively unaffected by changes in Gavins Point releases.

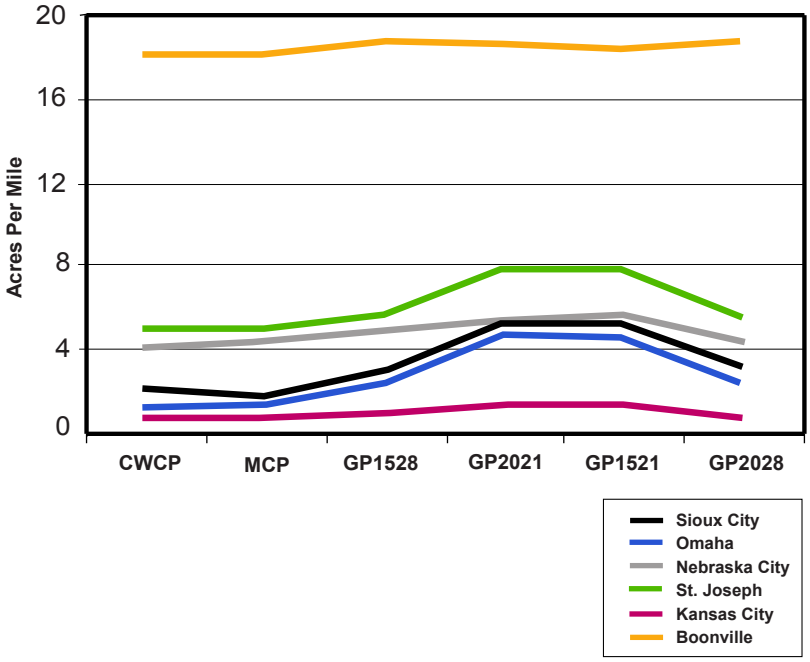


Figure 21. Acres per mile of Shallow Water Habitat Under the Alternatives

Spawning Cue

Corps and USFWS biologists agree that there are no data to support definition of a spawning cue that would successfully result in spawning on the Lower River. In January 2001, the USFWS asked the Corps to evaluate one set of criteria for the spawning cue. These criteria suggested a 20 percent increase in flow over a 3-day or less period when compared to the average of the flows over the previous 15 days. No duration was specified.

Results of the subsequent analysis of the MCP and GP options are shown in **Figure 22.** As the spring rise value increases, the 20 percent increase occurs in more years of the 100-year simulation period for the Study. A 21-day duration was selected for presentation, and a shorter duration would result in a shift in the curves on the figure in an upward (higher number of years) direction. In the case of the duration selected for presentation, it represents the approximate duration of the Gavins Point Dam spring rises recommended in the USFWS reasonable and prudent alternative (RPA) in the BiOp. The objective of the RPA in the BiOp was to have the spawning cue occur about one-third of the time. The two GP options with a 20-kcfs spring rise (GP2021 and GP2028) would increase the spawning cue frequency to about one-third of the time in the Sioux City and Nebraska City reaches. One other observation from this figure is that the spring rise release from Gavins Point Dam has no effect on the frequency of meeting this spawning cue criteria in the Boonville reach. This reach is about midway between Kansas City and the mouth of the Missouri River. It is met about one-third of the time under the CWCP, the MCP, and the four GP options, as tributary inflows are a major factor for high occurrence of a spawning cue in this downstream reach. **Figure 22** also shows that if flows are basically uncontrolled (under the ROR alternative), the spawning cue is attained in more years for all of the reaches.

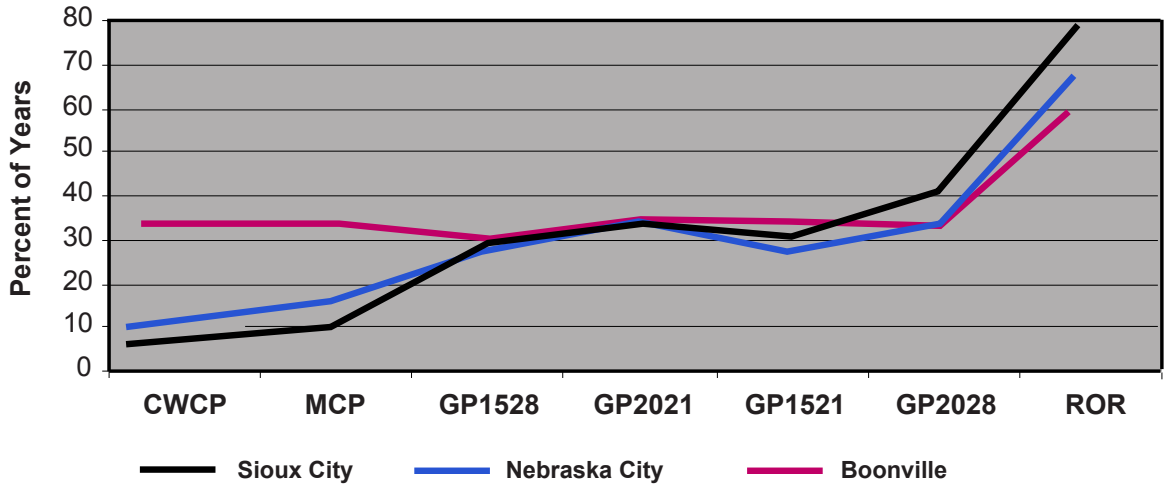


Figure 22. Percent of Years with a 21-Day Spawning Cue at Various Locations Under Various Alternatives

Wildlife Resources (Tern and Plover Habitat)

The Missouri River supports important forest and wetland habitat for a wide variety of wildlife, including at least 60 species of mammals, 301 species of birds, and 52 species of reptiles and amphibians. Of these, 6 birds and 2 bat species are listed as threatened and endangered under the ESA. The combination of open water, wetlands, and riparian habitat is particularly important for the large number of waterfowl that stop along the river during the spring and fall migration. Of the threatened and endangered bird species, of particular importance are the endangered least tern and threatened piping plover, because they depend on unvegetated sandbars and islands in the river for nesting and are directly affected by water level changes. These birds typically nest in colonies on river sandbars, sandy shorelines of lakes, or in sandpits along the river. Important nesting reaches are below Fort Peck, Garrison, Fort Randall, and Gavins Point Dams.

River hydrology and channel characteristics influence the composition and distribution of wildlife habitat along the river. Seasonal river flow and water level patterns dictate the frequency and duration of habitat flooding and the scouring of sandbar vegetation. Bank erosion and sediment movement in the riverbed also affect the creation and removal of sandbar and island habitat, and scouring sandbar vegetation.

Because the endangered interior least tern and threatened piping plover are directly affected by Missouri River flows, effects on these species were individually modeled. Impacts to wetland and riparian acreages provide insight into the effects of alternatives on other wildlife.

Two factors should be considered when reviewing impacts to tern and plover habitat. First, the reach of the river downstream from Garrison Dam has the greatest tern and plover habitat. Second, the reach of river downstream from Gavins Point Dam has provided the greatest number of fledged birds even though it has about 80 percent less habitat than the reach downstream from Garrison Dam. Tern and plover impacts are presented in terms of number of acres of available habitat for the 100-year period of record.

Figure 23 presents the tern and plover habitat in acres. In order to provide perspective, the ROR value is also shown. The CWCP provides the lowest amount of average annual habitat. The GP options all have higher values than the MCP, with GP2021 having the highest average annual value. The higher value for GP2021 when compared to GP1528 is largely due to increased habitat acreage below Fort Peck and Garrison Dams.

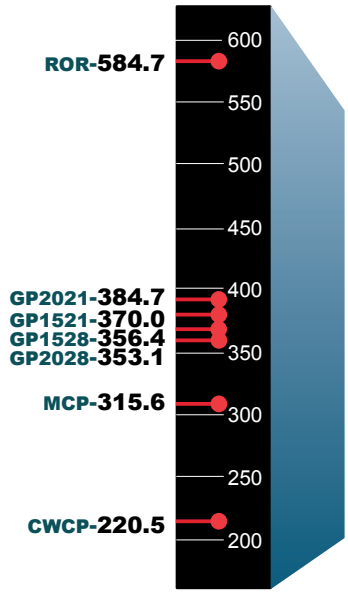


Figure 23. Average Annual Tern and Plover Habitat for the Alternatives (acres)

Wetland and Riparian Habitat

The floodplain of the Mainstem Reservoir System and Lower River has approximately 100,000 acres of wetlands, 60,000 acres of exposed shoreline, and 910,000 acres of riparian vegetation, which generally has a woody composition and is less resistant to shallow groundwater levels. The deltas of the mainstem lakes support varying amounts of wetlands depending on lake level. Near the end of the 1991 drought, there were 56,000 acres of wetlands in the deltas of the mainstem lakes. After the floods in 1993 and a return to near normal lake levels, most of the wetlands in the upper three lakes were flooded and new wetlands began forming at higher elevations in the deltas. The floods changed the character of the wetland and riparian vegetation along the Lower River. The riparian habitat in the river reaches between the mainstem lakes is limited because cottonwood trees have not regenerated under the controlled flow regimes. In the Lower River, wetland and riparian habitats are limited by channelization and bank stabilization. Wetlands are concentrated in remaining oxbows (isolated bends in the river) and backwaters.

Impacts to wetlands and riparian habitat under each of the alternatives were determined by relating hydrology for the 100-year period of record to potential losses of wetland and riparian acreage inventoried.

Figure 24 presents total wetland habitat in thousands of acres for the alternatives. Overall, the GP options and the MCP alternative result in an increase in wetland habitat when compared to the CWCP, with GP1521 having the highest average annual value.

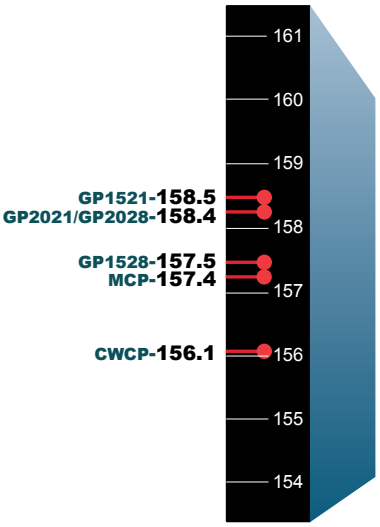


Figure 24. Average Annual Wetland Habitat for the Alternatives (thousands of acres)

Figure 25 presents total riparian habitat in thousands of acres. The CWCP has the highest riparian acreage. Total riparian acreage decreases as drought conservation (retention of water in the Mainstem Reservoir System) increases. Overall, the GP options have lower acreages than the MCP, with GP2028 having the lowest average annual value.

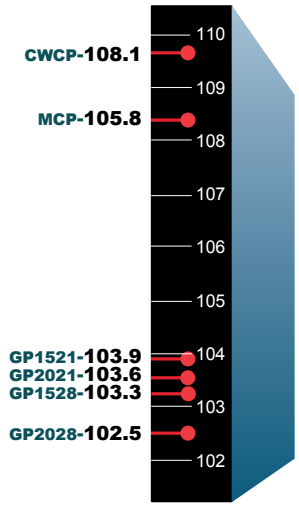


Figure 25. Average Annual Riparian Habitat for the Alternatives (thousands of acres)

Mississippi River Impacts

Differences in the operating criteria for the alternatives change the Missouri River release patterns from Gavins Point Dam. Under some alternatives, the differences affect Mississippi River flows. Because of concerns regarding impacts of Missouri River operations on the Mississippi River, an analysis was conducted to determine potential operation impacts of the alternatives on the Mississippi River. The RDEIS presents the results of the analyses of Mississippi River hydraulics, navigation, and shallow water habitat.

Figure 26 presents total Mississippi River lost navigation efficiency costs in millions of dollars per year on the Middle and Lower River reaches for the alternatives. The higher the cost, the greater the negative impacts on navigation efficiency. At an average of $45.3 million per year, the costs are highest for the CWCP. Adding the conservation measures to the alternatives had little effect on the costs, because the MCP reduces the costs by about $1.3 million. Reducing the Gavins Point Dam releases in the summer months to minimum navigation service (GP1528 and GP2028) lowers costs by about $6.1 million relative to those for the CWCP. Further lowering the summer releases to as low as 21 kcfs (GP2021 and GP1521) reduces the costs incurred to about $7.3 million less than those under the CWCP.

Shallow aquatic habitat in and near the Middle Mississippi River chutes provide essential habitat for a myriad of species, including the endangered pallid sturgeon. Changes in river stages resulting from Missouri River flow changes have the potential to affect this habitat in terms of accessibility, water quality, and habitat suitability. **Figure 27** presents the summation in changes in the area of shallow water habitat relative to those of the CWCP for ten representative chutes on the Middle Mississippi River for three of the alternatives for August and November. Stages for the CWCP and the MCP alternative are essentially the same in many years. As the summer releases from Gavins Point Dam decrease from full navigation service (MCP) to minimum navigation service (GP1528 or GP2028) to the 25/21 split navigation season (GP2021 or GP1521), the flows on the Mississippi River decrease in August. Associated with the cutback in summer releases at Gavins Point Dam comes a longer navigation season on the Missouri River as the water saved in the summer months is used to serve navigation in late October and early November. The average annual data presented in **Figure 27** support this, showing shallow water habitat decreases in August as the summer release decreases and increases in November when the releases increase.

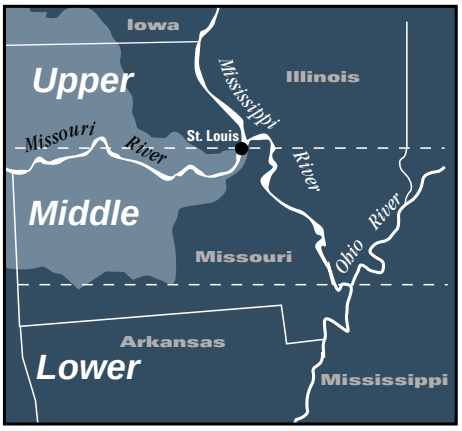


Figure 26.
Mississippi River Lost NavigationEfficiency Cost ($ millions)

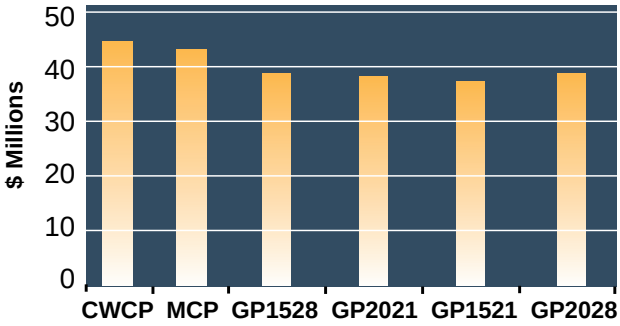


Figure 27.
Aquatic Habitat Wetted Acreage Changes for
Ten Middle Mississippi River Chutes*

Alternatives	MCP	GP1528	GP2021
August	0.0	-55.1	-91.4
November	-51.3	-3.8	35.6

*Based on Monthly Mean Stage

Historic Properties (Cultural Resources)

Historic properties, as defined by the National Historic Preservation Act, include historic and prehistoric archaeological sites, historic architectural and engineering features and structures, and resources of traditional cultural or heritage significance to Native Americans and other social or cultural groups. Paleontological resources include fossils of prehistoric plants and animals. Significant paleontological resources are found in the Fort Peck region. A variety of archeological sites, including historic forts and homesteads, are found within the lakes, along their shorelines, along the river reaches, and on adjacent uplands. Archaeological surveys have discovered nearly 3,000 sites along the Mainstem Reservoir System. Shoreline and bluff erosion is a constant threat to many of these sites. Some sites within the lakes are threatened by exposure during low-water periods.

Impacts of each alternative on historic properties were determined by computing an index value that is based on the number of months known sites are subject to shoreline erosion at the upper three lakes. The higher the index values, the less impact to known historic properties. Conversely, the higher the index value for the known sites, the lower the potential adverse effects to the unknown sites that have not yet been located under the surface of the lakes.

Figure 28 presents the index value for each of the alternatives. Inclusion of drought conservation measures increases the adverse impact to historic properties, because the CWCP has the highest value. Inclusion of the Gavins Point Dam flow changes further increases impacts to historic properties, with GP1528 having the greatest adverse effect.

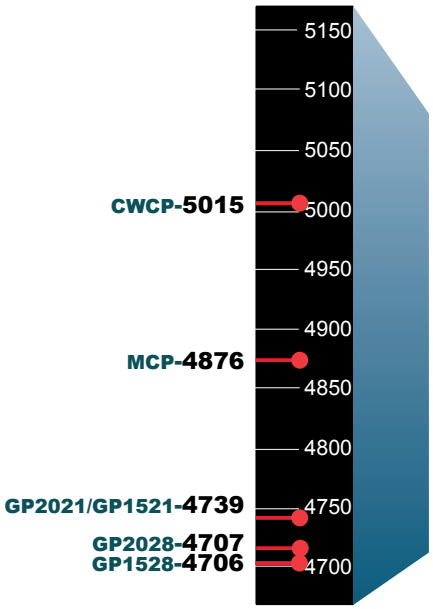


Figure 28. Average Annual Historic Properties Index Values for the Alternatives ($ millions)

Water Quality

Water quality in the Mainstem Reservoir System is generally good, with only minor or suspected problems. In the upper lakes, summer oxygen levels in the deeper colder waters are a potential problem, especially in droughts when the volume of the deeper coldwater layer is reduced. Water temperature is a concern in the river reaches, particularly in the Lower River where the water used for cooling by many powerplants is controlled under discharge water temperature permits. In extreme cases, water temperature increases would be limited by cutbacks in power production to maintain water temperature standards in the river.

Water quality impacts resulting from the alternatives are discussed qualitatively in the RDEIS. From the list of identified Missouri River water quality issues, only five issues – two lake and three river – appear to be affected positively or negatively by a change from the CWCP to the MCP alternative or the GP options. No change is anticipated for the other identified issues.

Eutrophication and the loss of coldwater habitat are the only two lake issues that appear to be affected by the alternatives. Both of these water quality problems are made worse by declining lake levels. The MCP alternative and GP options have increased conservation (retention of water in the lakes) during droughts. Increased conservation should decrease the lost of coldwater habitat and reduce the concentration of nutrients that can result in excessive algal blooms. Both of these water quality problems are greatest during the summer; therefore, the lower summer releases from Gavins Point Dam under the GP options should also have positive effects on the two lake water quality issues.

Of the many riverine water quality issues, three of them would not have a negative effect for a change in operations to the MCP alternative or the GP options. Meeting water quality standards for the discharge of thermal wastes could limit power production along the river reaches when Gavins Point releases are less than 25 kcfs. The two GP options with a 21-kcfs Gavins Point Dam release in the summer (GP1521 and GP2021) would provide flows at some of the powerplants that would limit the discharge of heated water, which could lead to cutbacks in power generation (see Water Supply discussion). Reduction in flows less than full navigation service could increase the potential to exceed existing State standards for recreation and aquatic uses; therefore, all four of the GP options could result in exceeding an applicable State standard. Finally, alternatives that increase spillway releases at any of the dams could lead to supersaturation of dissolved gases in the downstream river reach. The MCP alternative and the four GP options would increase spillway releases at one or more of the mainstem dams.

Sedimentation, Erosion, and Ice Processes

Mainstem Reservoir System operations have the potential to noticeably impact sedimentation and erosion processes. If erosion occurs at one location, deposition must occur in another reach. Although releases cause erosion, high water volumes such as the volumes experienced in 1997 have a much greater effect.

A Corps study initiated in 1995 to quantify the potential effects of releases on erosion examined data the Corps has gathered over the past 50 years in four reaches (downstream from Fort Peck, Garrison, Fort Randall, and Gavins Point Dams). The study found no relationship between the annual distribution of flows and the erosion of channel features affected by sediment erosion and deposition. Erosion was found to be more of a function of the total annual volume and not the distribution of that volume.

Ice formation and movements were also studied. All of the plans have the same minimum winter flow downstream from Gavins Point Dam and, therefore, a net difference from the CWCP is not expected. Higher flows, and in particular, the transition to higher flows, create icing problems.

Summary of IMPACTS of the Alternatives

The table below presents percentages to summarize and compare the effects of the MCP and the four GP options for the Missouri River and Mississippi River resources and uses presented in this Summary. Effects that represent a positive change from the CWCP of greater than 1 percent are shaded a light orange, and negative changes greater than 1 percent are shaded teal. This table provides the opportunity to see all of the effects on a relative change basis from the values computed for the CWCP. The Corps continues to emphasize that relative changes are more important to understand than the absolute values of changes.

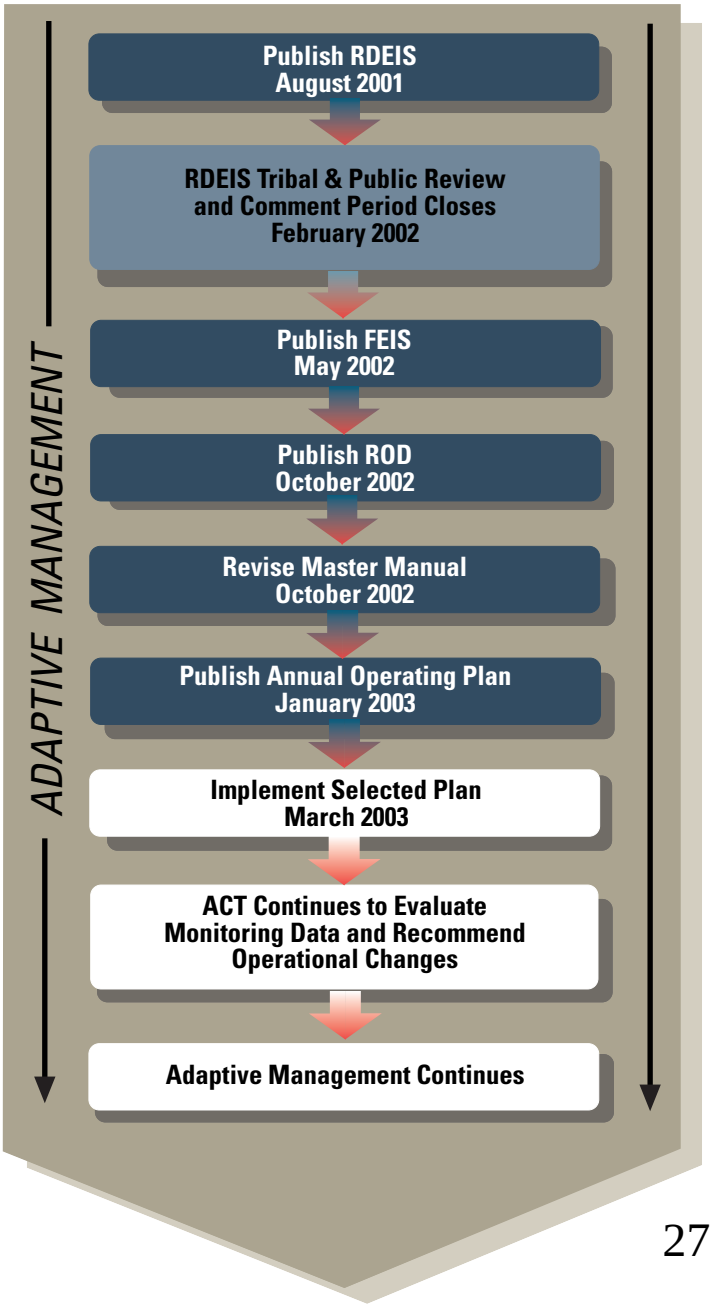
Resource/Use*	MCP	GP1528	GP2021**	GP1521**	GP2028
Flood Control	-1	-1	-1	-1	-1
Interior Drainage	-3	-7	-9	-8	-9
Groundwater	0	-8	-9	-9	-8
Navigation	-1	-24	-32	-31	-24
Hydropower	1	2	2	2	2
Water Supply	0	0	0	0	0
Recreation	4	4	2	2	5
Young-of-Year Fish Production	2	7	7	6	7
Coldwater Fish Habitat in Lakes	3	9	9	9	8
Coldwater Fish Habitat in River	2	7	7	7	8
Warmwater Fish Habitat in River	-8	-14	-15	-16	-16
Physical Habitat for Native Fishes	0	1	1	1	1
Wildlife Habitat (Tern and Plover)	43	62	74	68	60
Wetland Habitat	1	1	1	2	1
Riparian Habitat	-2	-4	-4	-4	-5
Historic Properties	-3	-6	-6	-6	-6
Mississippi River	0	0	0	0	0

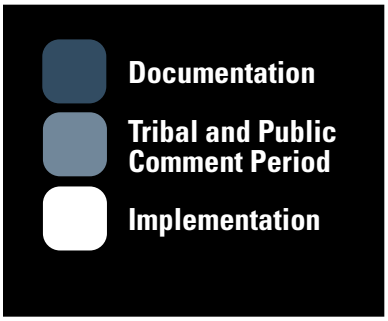
** Economic Use Impacts are National Economic Development only*
*** Navigation values could be as high as -86 percent*

The NEXT STEPS

A 6-month comment period will follow publication of the RDEIS. Workshops and hearings will be held throughout the Missouri River basin, including some Tribal Reservations and at some locations on the Mississippi River. Following the comment period, a FEIS will be prepared and circulated that addresses the Tribal and public comments received in response to the RDEIS and presents the impacts of the selected alternative. Following the FEIS, the Corps will prepare a Record of Decision, revise the Master Manual, develop an Annual Operating Plan that conforms to the revised Master Manual, and, finally, implement the selected plan. Throughout the completion of the Study and the implementation of the selected plan, the ACT will continue to review river monitoring data and make recommendations annually to the Corps for the upcoming year's operations. Also, the involvement of basin stakeholders will be clarified, implemented, and modified as necessary. **Figure 29** depicts these steps for completion of the Study EIS and implementation of a selected plan.

Figure 29. Study Process





Your Opportunity to PARTICIPATE

The Missouri River is important to many people. Over the past 11 years, basin Tribes; citizens; stakeholders; and local, State, and Federal agencies have participated extensively in the Study. The Corps recognizes that the decisions made as a result of this Study will have wide-ranging effects and we encourage you to make your opinions known.

The Corps will accept oral, written, and electronic comments until February 28, 2002. From October 2001 through February 2002, the Corps will host Tribal and public informational workshops and hearings at numerous locations throughout the Missouri River basin and at some Mississippi River locations. The purpose of the hearings is to provide the Tribes and the general public with an opportunity to express their comments about the RDEIS and the alternatives analyzed in detail, including the MCP alternative and the four GP options. Dates and locations of these workshops and hearings will be provided in a September 2001 newsletter and on the Northwestern Division's home page.

For More INFORMATION

You can request more information about the Study, be added to its mailing list, learn more about the Study, submit your comments, and become more involved in Missouri River Mainstem Reservoir System operations by:

- **Visiting the Northwestern Division home page at: http://www.nwd.usace.army.mil and selecting the Missouri River Master Manual EIS bar on the left side of the page (or selecting Water Management bar for current operations data)**

- **E-mailing your comments to:**
  Mastermanual@usace.army.mil

- **Mailing your comments to:**

  U.S. Army Corps of Engineers,
  Northwestern Division
  Attention: Missouri River
  Master Manual RDEIS
  12565 West Center Road
  Omaha, NE 68144-3869

- **Faxing your comments to:**

  U.S. Army Corps of Engineers,
  Northwestern Division
  Attention: Missouri River
  Master Manual RDEIS
  FAX number: (402) 697-2504

U.S. Army Corps of Engineers
Northwestern Division