GOVERNOR'S UPPER YELLOWSTONE RIVER TASK FORCE FINAL RECOMMENDATIONS

A summary of all 43 recommendations is presented below. These recommendations are <u>in no order of priority</u>.

The Governor's Upper Yellowstone River Task Force recommends that:

I. BANK STABILIZATION

- I.a. "A local Bank Stabilization Information Clearinghouse should be created to provide information about new and existing methods of bank stabilization, including methods that complement the natural system and methods that might be appropriate for specific individual situations."
- I.b. "Studies should be developed which would indicate what types of bank stabilization would work best to achieve particular goals within different geomorphic reaches of the upper Yellowstone River."

II. BRIDGES

- II.a. "When the following bridges are replaced or removed, hydraulic impacts identified in the Geomorphology Study should be lessened: Emigrant Bridge; Carter's Bridge; Interstate-90 Bridge; Railroad Bridge at Highway 10/89 South¹; Highway 10/89 South Bridge¹; Highway 89 North Bridge¹ (near the Shields River); Railroad Bridge at Highway 89 North¹ (near the Shields River); and Springdale Bridge."
- II.b. "Solutions should be developed to remove abandoned bridge abutments and piers, and to reclaim abandoned bridge approaches."
- II.c. "All new bridges and bridge substructure reconstructions (for example, piers and abutments) should be designed to minimize upstream and downstream negative impacts of sedimentation and gravel deposition."
- II.d. "Bridge design considerations on the upper Yellowstone River should include examination of the cumulative impacts and the costs and benefits of zero backwater standards at any scheduled reconstruction. As an initial project, a zero backwater design at the Highway 10/89 South Bridge¹ over the Yellowstone (east of Livingston) should be evaluated to increase the flow capacity of the river through town, and the Governor should enlist the cooperation and support of the railroad to build a parallel zero backwater bridge north of the Highway 10/89 South Bridge¹."

III. FINANCIAL INCENTIVES

III.a. "Financial incentives should be established to help landowners on the upper Yellowstone River, on a voluntary basis, (1) to remove flood control and bank stabilization structures that no longer function properly or are obsolete; and (2) to modify or replace flood control and bank stabilization structures, provided that such modified or replaced structures eliminate or mitigate undesirable impacts on the riparian system."

¹ Present day US Highway 89 (east of Livingston) was formally called Highway 10, and sections of that road still retain the Highway 10 designation. There are two sets of side-by-side bridges (public and railroad) crossing the upper Yellowstone River on Highway 89 within a short distance of each other; to avoid further confusion the following descriptive bridge information has been provided: The Highway 10/89 South Bridge and its parallel railroad bridge are located near KPRK Radio Station at T2S R10E Section 7. The Highway 89 North Bridge and its parallel railroad bridge are located near the Shields River at T1S R10E Section 26.

- III.b. "A Park County Bond Issue should be proposed to protect and preserve agricultural lands, scenic views, socially desirable riverscapes, and important riparian habitats along the Yellowstone River; and a representative Citizens' Advisory Council should be established to develop criteria, to recommend expenditures, and to facilitate approval of projects funded by public monies."
- III.c. "A fund should be established with the State of Montana to receive legislative allocations, agency grants, and private donations for the purpose of matching, on a dollar-for-dollar basis, all projects that have been funded by the Citizens' Advisory Council pursuant to a Park County Bond Issue to protect and preserve agricultural lands, scenic views, socially desirable riverscapes, and important riparian habitats along the Yellowstone River."
- III.d. "State, federal, and private sources should be developed to increase the funding available for conservation easements on lands in close proximity to the upper Yellowstone River."
- III.e. "A study should be conducted to determine the feasibility of creating a voluntary, market-based program to remove, relocate, or redesign bank stabilization structures by allowing transfers of, and trade in, state and federal bank stabilization permits between willing parties."
- III.f. "A grant writer should be engaged by the Montana Department of Fish, Wildlife and Parks, the Governor's Office on Economic Development, City of Livingston, and Park County to pursue funding for projects of joint interest related to the upper Yellowstone River."

IV. FISH / FISHERIES

- IV.a. "Annual fish population surveys should be conducted on all sections where they have historically been made. If indications of a declining population trend are detected, additional studies must be implemented to identify potential causes and recommend actions that will restore populations."
- IV.b. "Further investigations into the production and rearing of juvenile fish in the upper Yellowstone River should be conducted, particularly to determine the relative importance of lateral side channels, mainstem habitats, overflow habitats, and spring creeks."
- IV.c. "New irrigation projects should consider fish-friendly construction and management in their design."

V. FLOODPLAIN DEVELOPMENT

V.a. "No additional Livingston public schools should be constructed on Livingston Island (also known as McLeod Island)."

VI. FUTURE SCIENCE / MONITORING / RESEARCH

- VI.a. "The US Geological Survey-Helena and the US Geological Survey-Biological Resources Division should be encouraged to monitor and measure the effects of instream structures on the river over time."
- VI.b. "The Natural Resource Information System (NRIS) should house all Task Force Geographic Information System (GIS) information."
- VI.c. "A study should be conducted to understand the river dynamics and hydrology related to sloughing of river banks at Deep Creek, the Weeping Wall, and Mallard's Rest."
- VI.d. "A study should be funded to identify the current conflicts and potential future conflicts arising from changing uses of the upper Yellowstone River."

- VI.e. "The development and maintenance of a long-term database of macroinvertebrate populations should be encouraged to monitor water quality in the Yellowstone River."
- VI.f. "The drilling site known as Hobbs Well should be thoroughly investigated to determine what, if any, impacts it has created, or may create, on subterranean and surface water flows."
- VI.g. "People should be encouraged to study different techniques or ways to alleviate the flooding damage through the upper Yellowstone River study area."
- VI.h. "Regulatory program modifications for activities that affect the upper Yellowstone River should be considered in the context of the Governor's Upper Yellowstone River Task Force scientific investigations."
- VI.i. "A river migration study should be undertaken to measure the potential for river channel avulsion between the Livingston Ditch headgate and Interstate 90, and to identify measures which could be implemented to prevent flood damage to the Livingston urban area."
- VI.j. "The State of Montana, along with federal sources, should fund an Upper Yellowstone Research and Monitoring program to coordinate efforts by agency personnel, universities and researchers, and the community to develop and implement a long-term research and monitoring program in the upper Yellowstone River study area."

VII. NEW STAKEHOLDER GROUP

VII.a. "Stakeholder group(s) should be developed, with full public participation, to continue to monitor the status of the upper Yellowstone River, to make recommendations about river related issues, to encourage long-term monitoring of river related projects, to promote the completion of identified research needs, and to examine the implementation of the Governor's Upper Yellowstone River Task Force recommendations."

VIII. NINTH STREET ISLAND

VIII.a. "Implement a solution that minimizes cumulative impacts to achieve hydraulically-balanced water surface elevations, with little or no backwater, in the channels separated by Ninth Street and Siebeck Islands."

VIII.b. "Park County should be encouraged to develop a free-span bridge to Ninth Street Island and to pursue such a bridge through the Department of Transportation's Adopt a Bridge Program or any other funding source."

IX. NOXIOUS / INVASIVE PLANTS

IX.a. "Additional studies should be designed and conducted to document the proliferation of noxious or invasive plants along the river corridor, and to evaluate the impacts on fish, wildlife, water quality, soil and bank stability, and economic productivity; and programs that monitor and reduce invasive plant infestations should be supported."

X. PERMITTING / REGULATORY / MANAGEMENT DECISIONS

- X.a. "The streamlined uniform permit application process among local, state, and federal permitting agencies should be continued and, when possible, improved."
- X.b. "All permitting and/or management decisions (including the Special Area Management Plan) on the upper Yellowstone River should thoroughly consider and must recognize and respect:
 - 1. the function of the flood plain, including but not limited to: connectivity between the river channel and the flood plain; regeneration of cottonwoods and other riparian vegetation; and maintenance of side channel habitat for spawning and juvenile fish; and
 - 2. the public and private interest in protecting private property and important social, economic, and natural resources existing on or near the flood plain; and
 - 3. the geomorphology of particular river reaches and their different inherent characteristics."
- X.c. "Policies should be continued that allow for the removal of large woody debris on a localized basis to protect public and private infrastructure, to assure public safety, and to allow side channel function when necessary."
- X.d. "Necessary dredging of sedimentation should be continued to maintain irrigation structures and canals."
- X.e. "The Montana Department of Fish, Wildlife, and Parks should develop an angling 'closure' matrix specifically designed to address any future severe conditions on the upper Yellowstone River to protect its unique characteristics including its fisheries and fish habitat."
- X.f. "The US Army Corps of Engineers should include in their 205 Study: (1) an investigation of widening the channel by resloping the north bank, in a stepped or terraced fashion, around cross sections #55,000 and #56,000 on the preliminary floodplain map, while maintaining a park-like environment; and (2) should identify, if possible, funding for mitigation of landfills if necessary."
- X.g. "Park County should be asked to join with the City of Livingston to co-sponsor the Section 205 Study in order to develop a comprehensive approach to structural and non-structural solutions to floodplain management issues in and around the City of Livingston."
- X.h. "An analysis should be conducted to determine the feasibility of relocation and buyout options for property owners who are located or reside in the floodway in the Livingston area."
- X.i. "Mining and mining-related dredging should be prohibited in the active bankfull bed and banks of the upper Yellowstone River. Mining and mining-related dredging and sale of sand and gravel as a byproduct of bank stabilization, flood control, and maintenance of irrigation structures and canals are not prohibited under this recommendation.
- X.j. "The US Army Corps of Engineers should conduct a public scoping process during the development of the Special Area Management Plan for the upper Yellowstone River."

XI. PUBLIC STRUCTURES

- XI.a. "Existing public structures that have undesirable impacts on the upper Yellowstone River's riparian system function should be modified or replaced, provided that such modified or replaced structures eliminate or mitigate those undesirable impacts with no significant adverse effects on existing public or private entities."
- XI.b. "Any structural or non-structural modifications to the river bank through Livingston should blend with the environmental, cultural, and historic themes of the community to the extent possible."
- XI.c. "Construction of a flood control dam and impoundment on the mainstem of the Yellowstone River not be considered as a potential management alternative."