South Platte River Program Notes

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The South Platte River Program continues to work with the cities, counties, special districts and property owners along the river to help preserve its corridor, improve conditions and habitat of the river, and assist with the maintenance of this valuable natural resource downstream of Chatfield Reservoir. One of the largest open space preservation activities this year was the acquisition, by Adams County, of the Bromley property. We were proud to assist this effort and contributed a significant portion of the total funding. This effort will now insure that approximately 140 acres of land will be preserved and reclaimed for wildlife and human enjoyment as a natural area along the river.

Maintenance Activities Routine Maintenance

In 2002, South Platte River routine maintenance efforts included:

- 192 river miles (equivalent) of trash and debris pickup and removal
- 3.6 acres of string-trim mowing at access ramps and rest areas
- 78 miles (equivalent) of recreation/maintenance trail edge mowing

Due to this year's drought conditions, the projected need for 9.1 miles of tree trimming and pruning along the river trails was unnecessary.

Approximately 180 truckloads of trash and debris were removed from the river and taken to landfills. Next year we will be adding a total of 5.3 miles of trash and debris pickup to our routine maintenance activities. The ultimate goal will be to include the entire reach of the river from Chatfield Reservoir to 168th Avenue. Colorado Total Maintenance, Inc. has been selected to perform these services in 2003.

For the sixth consecutive year we participated in the Greenway Foundation's annual NIMBY (Not In My Back Yard) Fest volunteer trash pickup, during which an additional 60

cubic yards of trash were removed. In addition, government personnel and volunteer groups have picked-up and removed trash from the river corridor throughout the year. Trash is also regularly removed from trash receptacles that are maintained by park personnel along all recreational trails.

Not only does our routine contractor remove lightweight debris, but also many heavier items such as 200 cubic yards of reinforced concrete pipe, heavy equipment tires and scrap metal. This effort has not only made the river more scenic but has also improved safety for recreational users.

Routine maintenance continues to be the most cost effective program in terms of environmental enhancement and public service. Without it, the trash along and in the river would accumulate tremendously. The routine maintenance program now completes more than twice the number of trash pickups and trail mowings along the South Platte River than we did 15 years ago

Noxious Weed Management

In 2002 the Routine Maintenance Program continued to work with local government agencies to control infestations of non-native and undesirable tree species along the river. In the City of Brighton's Morgan Smith nature area we removed approximately 50 Russian Olive trees and planted 80 Cottonwood trees and Peach Leaf Willows. Working with the South Suburban Park and Recreation District and the City of Littleton, we removed 180 Russian Olives from the riverbanks in South Platte Park. In addition, we removed over 50 dead Siberian Elms in Denver County. Most of the trees that are removed, with the exception of Russian Olive, are mulched and placed back on the banks to protect soils from erosion.

The removal of invasive non-native trees provides the opportunity for native cottonwoods, box elders, willows, and

others to be planted or to establish naturally on their own. These native species provide the best habitat for the indigenous wildlife along the river.

An area of growing concern is Invasive Noxious Weeds. These weeds threaten habitat, decrease the value of infested lands to the indigenous wildlife and adversely affects public use. With the adoption of an integrated approach to noxious weed management, the routine maintenance program is now equipped to deal with invasive weed species. Our efforts include aggressive weed mowing, hand pulling and selective use of approved herbicides. Our relationship with various county weed managers allows us to coordinate everyone's activities to maximize public benefit of these efforts.

For the second year in a row, District personnel have attended the Colorado Weed Management Association's (CWMA) yearly conference. This forum provides training in Noxious Weed management and control and an opportunity to network with experts in this field.

District personnel also attend monthly CWMA meetings sponsored by the Colorado Division of Wildlife. The relationships that have developed from these meetings are helping us to continue to be an effective partner in the fight to control noxious and invasive plant species.

Restoration Maintenance

In 2002, the restoration maintenance program did the following projects:

- Constructed a new boulder grade control structure at the Henderson flow gage near 123rd Avenue in Adams County (See "Rebuilding Henderson Gage Control Section")
- Reconstructed of the Gardener's Diversion Dam just upstream of the York Street bridge in Adams County

The reconstruction of the Gardener's Diversion Dam was a cooperative design and construction effort between the District and Xcel Energy. An old, failing, wooden diversion structure, operating as a makeshift river grade control, was removed and replaced with a sloping, partially grouted boulder grade control structure. For safety and fish passage reasons, a boatable chute (assuming we have adequate water flow) was incorporated into the structure. Xcel split the cost of the grade control and designed and paid for a concrete water diversion/bypass structure in order to supply water to the Cherokee Power Generating Plant.

The District continued to assist local governments with maintaining the recreation trail used by the District for maintenance access.

In 2003 we expect the program to include the following restorative maintenance projects:

- Construction of sloping boulder grade control structure and bank restoration upstream of 120th Avenue in Commerce City
- Extension of the river recreation trail northward below 104th Avenue (also funded by Adams County)
- Construction of boulder grade control structure and old bridge pier removal at 16th Street in Denver

- Several bank stabilization and restoration projects in Adams County, Thornton, and Littleton
- Design and construction funding assistance for pedestrian trail crossing in Adams County

Cooperative Projects with Private Property Owners

Cooperative projects are constructed on flowage and maintenance access easements dedicated to the District by private property owners adjacent to the river in exchange for river restoration work. To date over 630 acres of such easements have been dedicated, resulting in over 24 bank stabilization and/or river grade controls and riparian revegetation projects since 1988. In most cases, the local parks departments use these easements for the construction of recreation trails which double as river maintenance access.

No new cooperative projects were constructed this year, however, two more easement dedications were completed. The previously mentioned Bromley property, purchased by Adams County, included a flowage and drainage easement that now allows the District to perform river maintenance and have a voice in how this property will develop. The McIntosh Farm Company also dedicated 31 acres of riparian area in order to get District assistance with bank stabilization and restoration along their property. We

hope to complete this bank work in 2003.

Capital Improvement Projects Upper Central Platte Valley Project

The U.S. Army Corps of Engineers has now completed the river reclamation improvements for the Colfax Reach (I-25 to 14th Avenue) of the river in Denver. The Corps has also completed a Feasibility Study of a river restoration project for the Sun Valley and Zuni Reaches (14th Avenue to upstream of 8th Avenue) in Denver. Final design is underway by the Corps for this \$18,000,000 project; however, Congress has not yet authorized construction funds.

Phase 3 of Globeville Project

The District has been working with the City and County of Denver to develop a new design for Phase 3 of the Globeville project along the South Platte River. This phase will relocate the diversion dam for Burlington Ditch upstream of Franklin Street and, in the process, take over 200 acres of residential, commercial and industrial lands out of the FEMA designated 100year floodplain in Denver. Because of the unusual geometries involved, the entire diversion system and channel modifications are being studied at the Colorado State University Foothills Hydraulics Laboratory in Fort Collins. Denver and the District hope to have this project sufficiently advanced to begin construction in late 2003.

District projects in the news

Jewell Wetlands

The Jewell Wetlands project was a joint effort between Aurora and the District to provide flood detention in the upper Westerly Creek watershed, while preserving what the E PA described as one of metro Denver's most important wetlands. The prime consultant for the project, Design Concepts, received two design awards from the Colorado Chapter of the American Society of Landscape Architects. The project received the CCASLA's Merit Award for Design, and a special Land Stewardship Award, which recognizes a project that creates a model for future projects by other landscape architects.

Levden Dam

Leyden Dam, a water supply reservoir for about 90 years, was converted to a flood control facility by Arvada, Westminster, Jefferson County and the District. An article describing the design and construction of the project was the cover story in the July, 2002, issue of *Public Works* magazine.

Parkfield Lake II

The project consists of a 7-acre stormwater detention pond/wetland, approach channel and 56th Ave. crossing constructed on the Rocky Mountain Arsenal (RMA) by the Parkfield developers. The District acted as facilitator of the agreement between the

RMA. Parkfield and Denver which allowed the project. As part of the agreement, Denver assumed the maintenance of the completed facility. In turn, the District agreed to make the project eligible for District maintenance assistance. This made it easier for Denver to accept the responsibility. The District also contributed one-third of the cost of the 56th Ave. crossing. The DIA Partnership, at its 2^{nd} Annual "The Sky's the Limit Awards Event" presented an award to the project, stating, in part, that, "This project added to the sustainable and smart growth image of the (DIA) district in a demonstrable way that coalesces commercial, residential and open space recreational land uses."