



Bureau of Reclamation
Environmental Resource Management Division
6150 West Thunderbird Road, Phoenix, AZ 85306
Attention: Kimberly Musser, re: PXAO-1500

February 2, 2016

Dear Ms. Musser,

The Community Water Coalition urges the Bureau of Reclamation to reconsider the plan to remove 7,000af of effluent from the Santa Cruz River at the Tres Rios water treatment facility. The impacts of even a temporary removal of water will cause enormous damage to the critical riparian area that has been established in the many years of flow supported by effluent discharge in the channel. Our concerns represent the perspectives of diverse interests in the Tucson Basin, including nonprofits, businesses, and individuals with expertise in water and social justice issues, and our objections to this proposal are in line with those of Pima County.

After careful review of the "Draft Environmental Assessment (EA) for the Construction of a Temporary Project to Reuse up to 7,000 Acre Feet Annually of Effluent at a Groundwater Savings Facility in Pima County", the Coalition has the following concerns:

1. The Draft EA acknowledges that water volume in the river has already been impacted by the changes in water quality following upgrades at the two WTFs that discharge effluent into the Santa Cruz River. Although these are beneficial for improved recharge, flows no longer extend as far as they once did, which has already had documented negative impacts to users and riparian vegetation downstream. Examples of these impacts include:
 - a. Loss of flow to the property owned and farmed by BKW Farms on Sanders Rd in Marana, leading to increased reliance on pumped groundwater.
 - b. Dieback and distress of cottonwood and willow populations at the North Simpson Farm property managed by Tucson Audubon, which provides a preview of the potential impacts to riparian habitat along the stretches of river that will be impacted by this proposed project. Only 13 months since the cessation of perennial flow, they have recorded substantial dieback rates among the large gallery forest trees (Table 1 in attachment, Gallery Forest Conditions). Only 17% of willow trees are not yet showing signs of stress, while 83% are either dead

Coalition Members

ACE Charter High School
Center for Biological Diversity
Cienega Watershed Partnership
Coalition for Sonoran Desert Protection
Community Food Bank
of Southern Arizona
Desert Watch
Native Seeds/SEARCH
Physicians for Social Responsibility
Primavera Foundation
Save the Scenic Santa Ritas
Sierra Club - Rincon Group
Sky Island Alliance
Tucson Audubon Society
Tucson Mountains Association
Watershed Management Group

Business Affiliates

Borderlands Brewing Company
Crow Communications Group, Inc.
La Cocina
Wells Fargo Advisors – Jennifer Mills
Technicians for Sustainability

or have had more than 25% structural dieback. Cottonwood trees show rates of dieback and distress that are far lower, but still troubling, 34% dead or stressed. These significant impacts are occurring even in light of substantial rains experienced in the region last winter and this winter.

2. The 5-mile stretch highlighted as impact area in the Draft EA, where base flow would cease for most of the year encompasses the rich riparian habitat of the Santa Cruz River Oxbow which features hydriparian species including willow, cottonwood, and mesquite, and is designated as an Important Riparian Area (IRA) on Pima County's Riparian Classification Maps. This area provides important bird habitat, wildlife connections to Tortolita and Tucson mountains, and nesting and foraging for raptors and large mammals, in addition to a social asset as a site for recreation and birding. The months of November – January, when effluent would not be diverted to the Groundwater Savings Project, would not provide substantial benefit to this area because water is most needed in the hot, dry months of April – June.
3. Loss of riparian vegetation in the Draft EA is underestimated. In addition to the estimated loss of flow along the Oxbow channel and downstream that impacts 74 acres, the Draft EA fails to consider impacts to the Marana High Plains Effluent Recharge Project, in which BoR was an original partner, and the Bridle Bit Ranch. Both areas receive water through the Oxbow channel.
 - a. Loss of water to the Marana High Plains Effluent Recharge Project would impact an additional ~10 acres that supports significant riparian species including willow, mesquite, and others. The recharge pond supports habitat for migrating wading and shore birds, in addition to recharging 600af/yr into the local aquifer.
 - b. Loss of water to Bridle Bit Ranch would impact an additional 63 acres that supports pasture for grazing cattle. This land is supported by Pima County to preserve cultural heritage as endorsed in the Sonoran Desert Conservation Plan.
4. Loss of these critical riparian areas would not only imperil riparian plants, wildlife, and bird species that rely on these effluent-supported stretches of the Santa Cruz River. There would also be significant impacts to community recreation assets and the local economy. Three examples of where an economic impact of loss of riparian habitat can be expected are:
 - a. Birding and wildlife viewing: In the 2013 study conducted by Tucson Audubon Society, *Economic Contributions of Wildlife Viewing to the Arizona Economy: A County-Level Analysis*, they found that Pima County received a benefit of \$304,368,133 at watchable wildlife sites visited in 2011. Loss of riparian habitat in the areas affected by this proposal will result in a decline of quality birding and wildlife viewing opportunities.
 - b. The Loop Bicycle and Pedestrian trail: Pima County's 2013 report, *Economic, Environmental, Community, and Health Impact Study*, was unable to determine a hard dollar amount for annual economic benefit of the Loop to the region. However, they cite benefits to employment, tourism, public health, property values,

and alternative transportation goals that all have a positive impact on the local economy.

- c. Mitigation for habitat loss: Pima County Flood Control District estimates a loss of *at least* 24 acres of hydroriparian habitat along the county-owned portion of the Oxbow. Based on Regulated Riparian Habitat Offsite Mitigation Guidelines for Unincorporated Pima County and using a conservative estimate, of \$40,000/acre, the loss of habitat is estimated at \$960,000. (This is in addition to the \$120,000 value of losing 400 – 600af of storage credits at the Marana High Plains facility.)

In light of these impacts, the Community Water Coalition is strongly opposed to the Bureau's project as proposed. We would encourage the Bureau to instead work with local water experts and groups, such as our own, to find projects that utilize effluent to improve, rather than degrade, riparian habitat in the region. The Community Water Coalition would be happy to work with the Bureau on such efforts.

In addition, the Community Water Coalition is eager to work with Bureau of Reclamation and other entities to advance changes to the recharge credit policy that will allow communities like Tucson that are reaching a high threshold of groundwater recharge to receive 100% credit for in-stream (managed) effluent recharge projects.

Sonoran Institute, who in partnership with Pima County, tracks conditions along this stretch of the river as part of the Living River Project, also endorses the comments submitted in this letter.

Sincerely,



Randy Serraglio
Chair



Louise Misztal
Secretary



Lisa Shipek
Treasurer