

Conceptual Restoration Plan and Cumulative Effects Analysis
Rio Grande – Caballo dam to American dam, New Mexico and Texas
Prepared for USIBWC under (MOU) IBM 92-21, IWO No. 31

Third Stakeholder Meeting in Las Cruces, NM – Tuesday December 16, 2008
- Meeting Notes

MORNING SESSION:

Regarding the Yeso site, Kevin Bixby (SWEC) asked why the meander was not reopened to provide for flow through.

William DeRagon (USACE) answered that this approach was considered (and preferred) but the ground elevation was too high as compared with the 3500 cfs Water Surface Elevation (WSEL) to accommodate this restoration approach (excessive ground lowering would be required).

Seldon Middle – Todd Caplan (Parametrix) commented that ET for the restored site should go down when compared with the existing condition of re-sprouting salt cedar.

Kevin Bixby asked about water rights needed to implement the overall restoration plan. William DeRagon answered that costs were provided which relate to ET only. However, water rights will be discussed in more detail during the afternoon session. Beth Bardwell (WWF) stressed that this is a conceptual plan and water rights will need to be addressed during the design and implementation process.

A follow up question was asked about “project water” being applied to non-project lands (specifically Seldon Canyon).

Gary Esslenger (EBID) answered that procedures are available to add new lands to the project.

The following discussion relates to restoration at tributary arroyo mouths:

Concern was expressed with Levee Protection needed and the associated cost.

Leticia Segovia (Dona Ana County Flood Commission) stated that due to levee deficiency FEMA has remapped the floodplain assuming levees are not in place. The maps are to be released for public review very soon.

Bob Mussetter (Mussetter Engineering, Inc.) pointed out that monitoring for the restoration at tributary arroyo mouths is important and to recognize that channel movement will not take place all at once. It will take years and multiple storm events. Also, this should be viewed as a pilot project to be evaluated and implemented at additional sites only if it is deemed safe and workable.

A question was asked about the level of involvement from the Fish and Wildlife Service (F&W).

Dan Borunda (USIBWC) answered that he has invited F&W and will coordinate with them. It was pointed out that they have attended meetings in the past but they are currently going through a change in personnel.

James Salopek (EBID) expressed the following concerns:

Restoration sites within close proximity to agriculture (pecan orchards specifically mentioned) could preclude spraying to control pests and diseases.

Increased numbers of mosquitoes may become a problem with restoration. Will these sites be drained or remain wet for long periods of time?

Is it possible that these restoration efforts could cause an infestation that could spread to croplands and cause disastrous effects? This is a fairly confined area that could be particularly susceptible to the spread of disease.

Kevin Bixby asked about restoration of aquatic habitat. He noted that these sites are predominately focused on riparian habitat.

William DeRagon responded that this is correct and noted the difficulty of providing aquatic habitat given the low flow in winter but added that some aquatic habitat may be enhanced in response to the restoration proposed at tributary mouths.

Kevin Bixby commented that he likes the restoration at Clark lateral waste way and would be particularly supportive of holding water there year round to provide some enhanced aquatic habitat.

Todd Caplan asked Kevin Bixby what aquatic species should be targeted.

Kevin Bixby listed several species (Long Nosed Gar, Small-mouth Buffalo Minnow) and expressed interest in bringing back any native species that were found in this range historically.

A question was asked why were more “no-mow areas” not identified and/or expanded upon in the report?

William DeRagon agreed with this observation and suggested that expanding upon the no-mow approach would be a good idea.

A follow up comment was made that no-mow in the Sunland Park Area and Anapra Bridge Area should be pursued and enhanced with supplemental plantings. This sort of restoration approach at these locations and other similar areas would be economical since they would require no other supplemental water or effort.

William DeRagon was asked to give an example of a site investigated but rejected and explain why it was rejected.

Garfield Drain was given by William as an example.

- As the investigation was conducted, more and more problems & costs were identified that caused a shift to other more cost effective sites. William expanded on the problems and costs associated with the rejection of this site.

Kevin Bixby then asked if the sites rejected are included in the report for possible reevaluation and future implementation.

William DeRagon responded that they are not in the report, however, there may be some information that was used and/or developed that we could include in the report or appendix.

Henry Magallanez (EBID) asked: What is the impact to the EBID drain system due to increases in flow through the Rio Grande (3500 cfs)?

Dan Borunda responded by saying that this restoration plan is conceptual at this time. More detailed evaluation will take place in the future during the design and implementation of the plan over the next 20 years. He said this will be a long process and we just need to take one step at a time. Dan Borunda went on to say that the Canalization EIS is a 20 year plan and it will take time to get these restoration sites on the ground. The issues will be evaluated and addressed before the sites are implemented.

Henry Magallanez then asked, "How long is the EIS good?"

Dan Borunda said the guideline is that a Record of Decision (ROD) should be issued within 5 years of the date of the approved EIS. Therefore, the ROD must be issued quickly or a supplemental EIS may be required.

Dan Borunda then went on to give a history of the EIS process that had taken place and the various alternatives that were investigated including, no action, various river management schemes, and the preferred alternative which includes restoration sites such as we are evaluating now.

A discussion ensued as to the effort that it would take if a supplemental EIS was needed. It was generally accepted that this effort would be minimal if all parties were on board with a recommended plan.

AFTERNOON SESSION:

Kevin Bixby asked about depletions as they related to mowing and asked if system wide mowing as compared to system wide cessation of mowing can be quantified.

Kevin Bixby directed this comment to IBWC and said that the EIS should address cessation of mowing for the entire canalization reach.

In response to the no-mow question, Jim O'Brien (Riada Engineering, Inc.) gave a presentation to show the no-mow approach will have very minimal effect to WSEL during high flow flood events when compared to the current maintenance approach which includes mowing. Of 9000 grid elements in his Flo-2d model, 7000 grid elements show slightly lower WSEL and 2000 grid elements show slightly higher WSEL.

Beth Bardwell then asked about increased ET due to allowing plants to grow instead of mowing them. She qualified this by saying that Todd Caplan indicated lower ET rates from mature plants as compared with salt cedar re-sprouts after mowing.

Phil King (NMSU/EBID) disputed this by saying that studies show mowing provides a dramatic drop in ET followed by a gradual rise in ET as the plants grow to maturity. At maturity they again match the original ET prior to mowing.

Phil King went on to say he would expect debris flow to increase following a no-mow policy (especially if there is an increase in dense woody vegetation). The increased debris flow from increased vegetation could cause increased risk of flooding as it piles up against bridges and other structures creating an obstruction to flow that could raise the WSEL resulting in overtopping and failure of the levee system. He also pointed out that the source of debris flow is currently coming from the tributaries and not originating from the Rio Grande overbank areas.

A follow up comment made the observation that in the case where dense salt cedar stands are replaced with grasses it could result in a reduction of debris flow, and therefore, it really depends on the vegetation proposed for restoration.

Gary Esslenger stated that another problem associated with the cessation of mowing is the increase in tumbleweeds that occur which create big problems for the farmers.

In response, a commenter stated that once the native vegetation is established there will be a reduction in tumbleweeds and they will be less of a problem in the future.

Conrad Keyes, Jr. (Paso del Norte Watershed Council) stated that the savings associated with a no-mow policy should be quantified for the site specific restoration cost estimates rather than showing a zero cost. He feels this is needed for the policy makers to formulate a decision.

A question was asked regarding the cost associated with the EIS process so far.

Dan Borunda's response was 2.6 Million Dollars.

A question was asked, "What happens to the water once 3500 cfs reaches American Dam?"

Beth Bardwell asked to defer this issue until after we finished the no-mow discussion and more time could be dedicated to it. She explained that a detailed discussion was planned specifically for this subject later in the afternoon.

James Salopek stated that a no-mow policy would contribute to an enforcement/safety problem by obstructing visibility into the Rio Grande corridor. It could encourage the homeless to live there, increase crime and hamper rescue efforts along the Rio Grande.

Phil King stated that EBID currently has authority for water rights on a maximum of 90,640 acres of land. He asked if the restoration sites are included within this acreage.

Gary Esslenger responded by saying that they were with the exception of the Seldon Canyon sites.

Beth Bardwell added that water rights must be acquired to offset restoration water needed.

Henry Magallanez said this was not applied water rights; it was instead termed as "water spreading". That's where water is placed on non-water righted lands.

Beth Bardwell said that water will only be applied on an annual basis from water rights obtained.

The comment was made that we should generate a cost for ET as well as applied water.

Leticia Segovia pointed out that they are channeling stored rain water (from tributary arroyo flooding) through agricultural lands to the Rio Grande. She asked if this water should be directed toward restoration sites to supplement water needs.

The following discussion ensued regarding directing rain water into restoration sites and developing restoration sites to accept and use this supplemental water.

Jim O'Brien said at the lower end of the reach especially, these rain events help in terms of overbank flooding to sustain restoration.

Leticia Segovia said that much of this rain water cannot physically reach the Rio Grande. This creates increased flooding and the water is not being effectively used in the river.

Jim O'Brien pointed out that flooding from Tributary Flows can, in some cases, be worse than flooding from the Rio Grande. A recent example of this is the Hatch flooding from the Placitas Arroyo.

Beth Bardwell commented regarding the cost estimate given for the 3500 cfs augmented flow release of \$9.5 Million. She thinks it would instead be a water lease once every 3 to 5 years rather than an acquisition. If it was to be an acquisition, then any excess would be leased back to EBID and ultimately the cost would not be as great.

Beth Bardwell added that a high flow release of 3500 cfs will affect the overall system, not just the restoration sites. She thinks it may have a positive effect on the overall system function to have a 3500 cfs release every 2 to 5 years.

Henry Magallanez again pointed out that this is considered water spreading and not applied water rights!

Mr. C.D. Schemnitz representing Southwest Consolidated Sportsmen stated that mowing is very detrimental to wildlife. He said that native wildlife species need diversity and we should not eliminate all the salt cedar stands at once during the restoration effort. He also stated that if we must mow, the timing should be considered so as not to adversely affect nesting and other wildlife activities. He said we need to carefully look at an approach to vegetation that will provide the greatest diversity for wildlife.

Kevin Bixby reiterated his concern regarding the mowing issue. He said this is so important because it was held up as being an issue that would be specifically addressed in the EIS. Mr. Bixby does not feel it has been fully addressed, especially on a reach wide basis.

A commenter asked if repairing the levees and implementing the restoration plan will occur concurrently.

Dan Borunda responded by saying maybe, if the ROD is complete and if it makes the project more efficient during construction. We can move forward with both the levee work and restoration once the ROD is executed.

Todd Caplan commented that a measurement of success is missing in the restoration plan. Adaptive management can only be implemented effectively if there is a monitoring plan and some measurement of success so you know what it is you need to do in order to guide the adaptive management. The goals must be clearly defined.

William DeRagon responded by saying that he could identify the value of establishing X acres of habitat as a measurable item that would improve (or increase) wildlife numbers.

Beth Bardwell gave a presentation discussing water issues. Some points she made were as follows:

Projects will not be implemented until water rights can be acquired.

-Either by leasing water rights.

-Or by permanent acquisition of water rights.

Buyer can be IBWC, State, WWF or other NGO.

Much discussion ensued.

William DeRagon & Todd Caplan primarily discussed the following:

Goal of a spring peak flow of 3500 cfs should be measured in terms of cost effectiveness on a system wide basis, not just for 30 restoration sites. There should be an overall ecological benefit for a full array of items such as flushing system, spreading seeds, germination, general application of water to overbank and creating some channel diversity, to mention a few.

It was also noted that the overbank will hold water for an extended period of time if subjected to overbank flooding.

Todd Caplan mentioned that the release shouldn't be made too late or it might favor seeding of salt cedar.

Bob Mussetter made the observation that if you are looking at a high flow release of 3500 cfs to flush sediment through the system, it may not be enough to have much effect.

Todd Caplan discussed at Beth Bardwell's request a pilot project in Colorado where plots are being irrigated and planted with Cottonwood and Willow. Early results are favorable.

Beth Bardwell then discussed that rather than send a large high flow block of water down the river, it may be more efficient and effective to apply supplemental water to irrigate restoration sites, perhaps by pumping water directly onto the sites.

James Salopek was quite supportive of this idea and said he thought it would be very effective and has been proven to be effective to irrigate agricultural lands historically. He said this is nothing new and doesn't see why it won't work.

William DeRagon said that if this approach is taken it would be relatively easy to both expand the number and increase the size of restoration sites.

Beth Bardwell and William DeRagon both agreed that we should build this type of flexibility into the EIS (and ROD) to account for changes in philosophy and future findings once implementation is taking place.

Senator Jeff Bingaman's Representative, Greg Bloom, wrapped the meeting up with the following statements:

Greg Bloom said he has witnessed much progress since this process began and it was very encouraging to him.

Senator Bingaman will be looking toward providing support for water projects and restoration in the Canalization reach.

The infrastructure enhancement plan being proposed under the upcoming administration could perhaps include green infrastructure as well.

Large construction ready projects that can be taken off the shelf for construction would likely be identified for implementation first.

It may be much easier for Senator Bingaman to move these types of projects forward under the new administration.

Senator Bingaman is very interested in doing something here and is supportive of restoration in the canalization reach. He will be working to provide funding to support this effort.