



TO: NORTH PLATTE CHOKEPOINT PLANNING WORKGROUP
FROM: PRRIP EXECUTIVE DIRECTOR'S OFFICE
SUBJECT: NORTH PLATTE CHOKEPOINT ALTERNATIVES
DATE: APRIL 6, 2021

I. INTRODUCTION

The Platte River Recovery Implementation Program (PRRIP or Program) continues to have a goal of achieving and maintaining a flow capacity of 3,000 cfs at the gage on the North Platte River at North Platte, Nebraska. The gage is located adjacent to the downstream side of the Highway 83 bridge, and the reach of the river extending a few miles upstream and downstream of the bridge is referred to as the “North Platte Chokepoint” because of diminished flow capacity in recent decades. Critically, flows of 3,000 cfs for Program purposes are to occur while remaining below minor flood stage, which the National Weather Service (NWS) has currently set at a stage of 6.0 feet. Based on the gage rating curve developed by the Nebraska Department of Natural Resources, discharge at that stage is presently estimated to be about 1,930 cfs.¹ Flows of 3,000 cfs occur at a stage of about 6.63 feet.

Starting in the late 1990s, significant flooding of residential areas on the north side of the river in the vicinity of North River Road and North Washboard Road began to occur at or around the 6.0-foot stage. Since the early 2000s, NWS had defined flood stage impacts based on observations in that area and low-lying areas of Cody Park. In an effort to reduce the north bank flooding impacts, the Program implemented two flood-proofing projects, the Whitehorse Creek drainage project (2014) and the State Channel Berm rehabilitation (2018). As early as 2012, the Program was having discussions with NWS about the possibility of increasing minor flood stage to 6.5 feet after completion of the flood-proofing projects. The flood stage increase would gain additional flow capacity for the Program (about 800 cfs) but would not achieve the full 3,000 cfs. Due to permitting issues, the need for mitigation wetlands, and other factors, completion of the flood-proofing projects took years longer than originally anticipated. Concurrently and somewhat intermittently, the Program continued to evaluate other solutions to close the gap in flow capacity below flood stage.

In July 2020, the Program, in coordination with stakeholder organizations and local, state, and federal government agencies, completed a flow test to observe the impacts of river flows up to and exceeding a stage of 6.5 feet. The flow test was a success in terms of demonstrating the benefits of the flood-proofing projects, as no floodwaters were observed anywhere in the neighborhood along the north bank of the river. However, impacts were observed at properties along the south bank in the Darlene Road-Red Fox Lane area (e.g., encroachment near a house foundation, septic system issues, a flooded storm cellar, and inaccessibility of an outbuilding) that the NWS determined were threats to property. As a result, NWS declared that minor flood

¹ Discharge at 6.0 feet generally ranged between 1,500 and 2,000 cfs during the Program's First Increment from 2007-2019.



stage would remain at 6.0 feet, and flood impacts definitions were revised to reflect observations during the flow test.

Absent the flood stage increase, the Program would need to find alternative means of increasing capacity below 6.0 ft by more than 1,000 cfs or find ways to bypass the North Platte chokepoint altogether. The North Platte Chokepoint Planning Workgroup has been reconvened to consider potential next steps towards resolving this issue. **The objective of this memo is to summarize the many previous efforts by the Program to identify and implement solutions to increase North Platte chokepoint capacity during the First Increment.**

The underlying premise of all of this work at the North Platte chokepoint is outlined in Section III.E.2.d of the Program Document, which among other things calls for delivering 5,000 cfs pulse flows of Program water for three days to the upper end of the associated habitat reach (AHR) at the Overton gage. It was eventually determined that this could be accomplished by EA releases passing up to 3,000 cfs through the North Platte chokepoint, supplemented by a Central Platte regulating reservoir at the upper end of the AHR. The J-2 Regulating Reservoirs Project progressed well into the design phase and would have had an outlet capacity of 2,000 cfs, but the project was derailed by significant cost increases and land acquisition issues. The Program has not identified any viable replacement projects that would have remotely comparable capacity to release water to the Platte River. Additionally, the 2019 State of Platte Report conclusively and negatively answered the question of whether implementation of short-duration high flows (SDHF) would produce suitable target species habitat.

Despite these setbacks, any capacity improvements that could be achieved at the North Platte chokepoint would still be beneficial to the Program. Ongoing and future Adaptive Management Plan activities and experimental flow tests can help determine how much increased flow capacity is actually necessary to achieve the Program's target species management objectives. An example of such a flow test is the germination suppression event planned for June 2021. For now, it is worthwhile to undertake the present review of previous alternatives considered for the North Platte chokepoint to determine if any projects still remain feasible or studies warrant updating and to potentially identify new alternatives that were not previously evaluated.

II. NORTH PLATTE CHOKEPOINT ALTERNATIVES

The following sections summarize chokepoint-related documents that were reviewed by the EDO and made available to the North Platte Chokepoint Planning Workgroup on the PRRIP website.

Parsons (2003). Preliminary Evaluation of Channel Capacity in the North Platte River at North Platte, Nebraska. Prepared for Central Nebraska Public Power and Irrigation District.

This study predates the Program by several years but was an attempt to understand channel capacity changes in the North Platte chokepoint following a decision by NWS in 2002 to lower minor flood stage from 6.0 feet to 5.7 feet. Flooding in the North River Road and North Washboard Road area was reported to be a relatively new phenomenon, having only started occurring a few years earlier in the late 1990s.



Parsons concurred with previous studies by the USGS and Corps of Engineers in the 1980s that determined the main channel capacity (different from the flood stage or carrying capacity) to be consistently on the order of 1,700-2,000 cfs. They stated that “Expecting, or trying to create, a channel capacity greater than this 1,700 cfs rate would be contrary to principles of dynamic equilibrium and therefore ill-advised.”

Around 1991 a sudden and significant decline in the hydraulic properties of the North Platte chokepoint was observed. Parsons hypothesized that this was primarily due to changes in the overbank areas, including the rapid and extensive growth of phragmites (“This is the most dramatic change documented for this period, and it alone could account for the changes and associated problems.”); the intentional blockage of a drain channel adjacent to residential properties on North River Road (and leading to a box culvert under Highway 83); and the State Channel, which was built around 1970 but was overgrown and basically non-functional for redirecting high flows towards the main channel by the 1990s.

Program Document, Attachment 5, Section 2. Includes J.F. Sato and Associates (2005). Final Report, North Platte Channel Capacity Study for the Water Management Committee, North Platte Cooperative Agreement.

J.F. Sato and Associates completed a report in December 2005 that included a series of possible alternatives for short-term improvements to channel capacity at the North Platte chokepoint. Attachment 5, Section 2 of the Program Document called for the implementation of the Base Case, Alternative 1, and Alternative 2, with proposed completion of the project by October 1, 2009. Elements of the proposed project were as follows:

Base Case

1. Open State Channel.
2. Extend State Channel north to existing ponds/North River Road.
3. Construct road ditch along west side of Washboard Road.
4. Open southern channel from road ditch to abandoned detour road.
5. Remove abandoned detour road and construct ditch to main channel of the North Platte.
6. Remove phragmites along opened drainages.

Alternative 1: All elements of the Base Case PLUS

1. Improve and open the channel to connect existing culverts in Washboard Road to the existing concrete box culvert under Highway 83.
2. Improve conveyance through the ponds to the main channel and provide overflow structure.

Alternative 2: All elements of Alternative 1 PLUS

1. Remove sand bar that is blocking the northern channel about 1,500 feet above Highway 83 and improve the channel downstream of this point.



J.F. Sato and Associates also proposed additional studies to identify long-term solutions, but the Governance Committee did not approve that proposal.

Short Elliott Hendrickson, Inc. (SEH, 2008). Project Update Report, Platte River Restoration and Enhancement Project.

SEH was hired in April 2007 to complete plans and specifications for the project outlined by J.F. Sato and Associates. They met with the property owners who would be impacted by the proposed project components and found that there had been little or no prior contact with these property owners. Based on objections from the property owners and/or permitting issues, nearly all of the construction elements of the project were eliminated. SEH then proposed a modified project that included the following:

- Island (sand bar) removal per the J.F. Sato and Associates report, but with a significantly reduced excavation component to minimize permitting requirements.
- Phragmites removal.
- Installation of staff gages at affected properties.
- Monitoring program to read staff gages from fall 2007 through fall 2008.
- Monitoring of controlled pulse flow release planned for spring 2008.
- Develop a calibrated HEC-RAS model to help with flow forecasting.
- Revise flood stage elevation.

Extensive phragmites treatment was conducted over the next few years. Spraying included the island or sand bar removal area, but no mechanical work was ever done there. SEH developed a HEC-RAS model and completed various analyses that were documented in this report. The pulse flow release occurred, but not until April 2009.

The report also documents a July 2007 meeting involving SEH, the Program, and staff from the NWS North Platte office. NWS stated the following:

The gage station at Highway 83 is not located in the ideal spot since it is downstream of the bridge. The ideal location would have been upstream of the bridge. If the gage station was upstream of the bridge there would be more of a direct correlation between the gage station elevation and the [affected] properties without the influences of downstream structures.

In 2008, NWS increased minor flood stage from 5.7 feet to 6.0 feet, where it remains today; discharge at this minor flood stage has ranged from 1,500 to 2,000 cfs at different times since then.

PRRIP Executive Director's Office (EDO) and U.S. Fish and Wildlife Service (2009). 2009 Platte River Flow Routing Test: Results, Information Gleaned, Lessons Learned.

The Program and its partners conducted a flow routing test in April 2009, reportedly reaching a peak of 1,747 cfs at a stage of 6.08 feet. The report stated these “key take-home points” regarding the North Platte chokepoint:



- The North Platte River at North Platte chokepoint remains a serious constraint on the ability of the Program to use the Environmental Account to help achieve short duration high flows of the desired magnitude. The NWS flood-stage capacity of this reach appears to be in the neighborhood of 1,700 to 1,800 cfs, based on the published flood stage of 6.0 feet at the North Platte gage. The Program has further work to do to achieve the 3,000 cfs capacity it has committed to at this location.
- Phragmites infestation of the Platte River remains a serious problem. These invasive weeds contribute to chokepoint problems around North Platte. Infestations may aggravate localized flooding problems in the mainstem Platte channel between North Platte and Lexington, and they appear to result in slower travel times, high transit losses, and greater peak flow attenuation as augmented flow moves down the Platte River system.

SEH (2009). Memorandum, Current Conclusions and Recommendations from the April 2009 Short Duration High Flows summary report and follow-up discussions.

SEH (2010). April 2009 High Flow Event, Project Update Report: Platte River Restoration and Enhancement Project.

These two documents are grouped together in one PDF file. SEH stated that “Based on the information gathered over the last two years, all indications are that the goal of allowing for increased flow through the reach can be achieved with a combination of vegetation removal and hopefully through the purchase of flow easements.”

SEH reported that velocity measurements in areas of phragmites were half or less than in the free-flowing sections of river “which means that flow capacity in a reach can be more than doubled by just removing the phragmites.” During the April 2009 flow routing test, it was also observed that previously-sprayed vegetation in the island/sand bar removal area was washed away and opened that channel. Based on these observations, SEH concluded that spraying and/or shredding of phragmites, followed by repeated annual pulse flows to wash away dead vegetation, should be enough to achieve the desired flow capacity through the North Platte chokepoint. SEH also recommended working with property owners to purchase flood easements during high flow events, and if needed, providing temporary protection of non-critical structures.

At the time, it appeared that gage stage had increased by about 1 foot for the 3,000 cfs flow rate since 1994. Despite the observations and conclusions described above, SEH also noted that modeling indicated that phragmites were only responsible for part of that increase. They suggested that sedimentation downstream of the Highway 83 bridge, possibly caused by a flow constriction at the east end of Cody Park, was also a contributing factor.

HDR and Tetra Tech (2011). Final Technical Memorandum, Evaluation of Alternatives for Improvements in Carrying Capacity of the North Platte River at North Platte.

At the time of this study, capacity at 6.0 feet was reportedly only about 1,500 cfs. HDR and Tetra Tech completed work based on the premise that sedimentation downstream of the Highway



83 bridge was the primary problem, and that the objective was to reduce the 3,000 cfs stage by 0.8 feet. They developed and screened six alternatives (two hydraulic improvement options and four sediment management options), and “the three alternatives with the highest rank...were evaluated for their effectiveness to increase the carrying capacity from the current discharge of 1,500 cfs to 3,000 cfs without increasing stage.” Those top three alternatives were as follows:

1. Construct an approximately 0.5-mile long levee along the south bank downstream from Highway 83 and reconnect the overbank channel along the north bank in the vicinity of Cody Park.
2. Widen the channel through the UPRR bridge and set back the bank and sandpit levees upstream and downstream of the bridge along an alignment that matches the main channel approaches to this existing channel constriction.
3. Reactivation of the north bank channel between the Highway 83 bridge and the restriction at the east end of Cody Park.

HDR and Tetra Tech completed both hydraulic and sediment transport modeling for these alternatives and a baseline condition. Results indicated that none of the alternatives would be successful in achieving the desired reduction in stage for a flow of 3,000 cfs, with the best being a reduction of 0.1 foot at the gage (compared to the 0.8 feet needed) and the worst actually increasing the stage at 3,000 cfs. Another notable conclusion in the HDR and Tetra Tech report was as follows:

Since the evaluated alternatives only include elements located below Highway 83, it is likely that implementing upstream measures that would reduce the sediment supply to the bridge (i.e., reactivation of overbank channels in the reach above the bridge) would be necessary to significantly reduce flood stages at the gage and possibly downstream near the Cody Park restriction. Based on the model results from the evaluated alternatives, reactivating overbank channels could result in increased sediment storage in the overbanks, thereby reducing the sediment supply to and associated aggradation in downstream reaches.

HDR and Tetra Tech thus recommended “that an evaluation of additional alternatives that include variations of these measures be carried out to assess the potential benefits on flood stage and carrying capacity.”

EDO (2012). Memorandum, Choke Point Options (June 10) and Choke Point Workgroup Conference Call Meeting Notes (June 20).

EDO (2012). Memorandum, Further Detail on Institutional and Engineering Options (July 19) and Choke Point Workgroup Conference Call Meeting Notes (July 26).

At the May 2012 WAC meeting, the EDO presented two options for increasing capacity at flood stage towards the 3,000 cfs objective:



1. Institutional options that may provide a basis for NWS to increase flood stage from the existing 6.0 feet (capacity of approximately 1,560 cfs) to 6.5 feet (capacity of approximately 2,400 cfs).
2. Engineering the river to increase capacity at flood stages.

The WAC supported an expenditure of \$150,000 to implement some of the institutional options and formed a new workgroup to study engineering options.

Institutional options included implementation of flood-proofing projects or buying out potentially affected properties. In fall 2011, the EDO met with representatives from the City of North Platte and Lincoln County to discuss possible flood-proofing projects. In May 2012, the EDO met with NWS North Platte to discuss those projects as a possible basis for increasing flood stage. NWS identified the developed area along North River Road west of Highway 83 as the primary area of concern for potential flood impacts to structures. NWS also explained that “Flood stage is equal to the stage where flow initially overtops the channel banks, but is not based on stage when high ground water levels cause flooding.”

The three proposed flood-proofing projects were as follows:

1. Reactivation of the State Channel
2. Construction of a new outlet from a gravel pit pond on the east side of Highway 83 to make more effective use of natural drainage near North River Road west of Highway 83.
3. Installation of driveway culverts in the road ditch on the north side of North River Road to improve drainage to Whitehorse Creek.

The Whitehorse Creek drainage project was completed in 2014, and the State Channel berm rehabilitation was finally completed in 2018. The gravel pond outlet was determined to be an inefficient and comparatively costly solution and was not implemented.

Potentially affected properties to be targeted for buyouts were identified based on flood inundation modeling by the EDO and anecdotal information from the summer 2011 flooding. The total cost of buyouts was estimated to be about \$3.4 million. The EDO noted that “In addition to the high cost, property buyouts are likely politically unacceptable until all other options have been exercised, and SDHFs are deemed essential for successful Program implementation.” Based on feedback from the workgroup, the EDO completed additional analyses to reflect the benefits of flood-proofing projects and evaluated combinations of buyouts and flood easements. Estimated costs still ranged from \$1.9 to \$4.3 million depending on the alternative. The EDO said “There is a low likelihood of all owners willing to sell or enter into easements, and as a result this alternative should not be considered further.” However, the workgroup requested that the option be retained for further consideration.



Four engineering options were presented to the workgroup for discussion:

1. Existing or new infrastructure to divert water from North Platte River to South Platte River to circumvent the North Platte chokepoint issue (e.g., additional capacity through NPPD's system).
 - a. In the NPPD system, a combination of Sutherland East Reservoir and a new South Platte River outlet was identified as the most feasible option but was considered a long-term solution at best given the high cost and lengthy timeline to develop. The outlet alone (via Fremont Slough) was estimated to cost \$10 million in 2012. In an October 2020 email, Jeff Shafer said "NPPD believes the Sutherland East concept is not feasible due to the estimated costs. We are still interested in an additional outlet from Sutherland Reservoir and would be open to studying the concept."
 - b. A concept involving an 18-inch pipeline from the North Platte River to the South Platte River with a capacity of 22 cfs and a cost of \$1.5 million was briefly considered but not pursued further.
 - c. Improvements to existing canals that divert from the North Platte River and return to the South Platte River were considered to be a low-cost solution that should be explored further.
2. Additional storage in existing canals/reservoirs in CNPPID's system available for releases to the central Platte River.
 - a. Any potential regulating storage in CNPPID's system was very limited, and this concept was eliminated.
3. Dredge material from the North Platte River to provide additional capacity and potentially modify North Platte River channel dimensions to maximize sediment transport capacity.
 - a. Dredging options were focused on lowering the channel bed in the reach between the Highway 83 bridge and the UPRR bridge, with the anticipated result being a comparable reduction in the stage for 3,000 cfs. However, dredging would need to be repeated periodically to maintain hydraulic capacity.
 - b. The workgroup suggested the use of jetties or bendway weirs as a means of inducing scour and reducing the need for repeat dredging. Initial analyses indicated that such structures would not be appropriate in this reach of the river and would not achieve the intended objectives.
4. Install sediment collector(s) on the North Platte River to reduce sediment input and potentially induce "natural" dredging.
 - a. With costs similar to dredging but the outcome more uncertain, these were not pursued further.

Out of all of these engineering options, only improvements to existing canals and various dredging options were considered in future evaluations.



EDO (2014). Memorandum, Spring 2013 SDMF Release Hydrologic Summary.

In April 2013, the Program conducted a pulse flow release that created short-duration medium flow (SDMF) conditions at the associated habitat reach. The Keith-Lincoln, North Platte, and Suburban canals were used to route water from the North Platte River to the South Platte River, bypassing the North Platte chokepoint. Of 588 cfs collectively diverted into the canals from the North Platte River, only 265 cfs (45 percent) was returned to the South Platte River. The Keith-Lincoln Canal was the least effective and was eliminated from consideration for future flow routing activities. The North Platte and Suburban canals were to be retained for further evaluation, and it was noted that improvements could be made to increase conveyance efficiency. However, no specific improvements to the existing canals were ever pursued.

Anderson Consulting Engineers, Inc. (ACE, 2015). Memorandum, North Platte Choke Point: Investigation of Channel Modifications Upstream of Highway 83 (January 21).

ACE (2015). Memorandum, North Platte Choke Point: Feasibility Assessment of Recommended Alternatives (May 5).

ACE (2016). Memorandum, North Platte Chokepoint: Feasibility Assessment of Recommended Alternatives.

ACE (2018). Memorandum, North Platte Chokepoint: Updated Modeling and Inundation Mapping.

Overall, this series of memos by ACE presents refinements to concept evaluations that began at the time of the June-July 2012 EDO memos discussed above. Initial analyses showed that dredging the river channel could achieve the desired flow capacity at the North Platte chokepoint, but that it would be lost within 3-5 years. It was also found that the addition of jetties or bendway weirs did not improve the longevity of dredging improvements, and thus recurring maintenance would still be necessary.

In a discussion of an “existing conditions” model run, the January 2015 ACE memo describes fairly rapid changes in the hydraulic capacity at the North Platte chokepoint during and just after a major flood event:

Historic field observations and measurements indicate that the hydraulic capacity at Highway 83 at 6.0 foot flood stage was approximately 1,500 to 1,600 cfs prior to the 2011 flood event. Just after the 2011 flood event, capacity at flood stage increased to approximately 2,600 cfs. However, within a few months of the 2011 flood, hydraulic capacity at the Highway 83 gage was diminished to 1,500 to 1,600 cfs.

With regard to modeling of this event, ACE concluded the following:

The 1D sediment transport model is capable of recreating observed trends in hydraulic capacity before and after the 2011 flood event. However, the temporal rate at which the model predicts changes in hydraulic capacity is slower than what has been observed in



the field. Channel response likely occurs quicker than the sediment transport model is predicting.

Based on a series of model analyses, ACE found that a combination of upstream channel improvements (e.g., channel widening), dredging downstream of Highway 83, and installation of jetties or bendway weirs downstream of Highway 83 appeared capable of maintaining the long-term hydraulic capacity target for the entire 16-year model period. This became the Recommended Construction Alternative, but the potential longevity of the project should be viewed with some caution given the observations about the temporal rate of modeled flow capacity changes.

The May 2015 ACE memo further developed the details and feasibility assessment of the Recommended Construction Alternative. Total cost to implement the alternative was estimated at about \$3.3 million, plus annual O&M costs of \$30,500 per year assuming vegetation treatment every three years and dredging every five years. Given anticipated permitting requirements, it was expected that the Recommended Construction Alternative would take a minimum of 4 years to implement.

This was compared to a Property Inundation Compensation Alternative (flood easements), which incorporated 28 parcels totaling 87 acres, and two secondary buildings, and was estimated to cost about \$374,000. These costs did not assume any acquisition of the impacted land or structures. Rather, “this information represents a reasonably conservative estimate to initiate the negotiation and development of inundation compensation agreements with each individual parcel owner,” which in turn assumes that property owners are actually willing to enter into such an agreement.

The September 2016 ACE memo retained the same information about the Recommended Construction Alternative and the Property Inundation Compensation Alternative but added a new alternative to bypass the chokepoint by diverting 1,500 cfs from the North Platte River to the South Platte River via existing diversion structures and conveyance facilities. Improvements to the Keith-Lincoln, North Platte (Platte Valley Irrigation District or PVID), and Suburban canals had not been pursued further after the 2013 SDMF release, which had shown relatively little capacity to route water through these canals and around the North Platte chokepoint. This new alternative proposed the construction of entirely new parallel canals with much larger capacities. Several alignments were investigated, with the most feasible being a new canal running parallel to the PVID canal. In addition to excavation, this new canal would require land acquisition and numerous road, rail, and siphon crossings. Costs were estimated to be more than \$13 million plus \$10,000 for annual O&M.

The June 2018 ACE memo documented updated modeling using 2017 LiDAR data (previous modeling used 2009 LiDAR data) to demonstrate the benefits of the State Channel Berm and also updated the mapping and costs associated with the Property Inundation Compensation Alternative. The revised cost estimates for this alternative ranged from \$92,400 to \$320,400 depending on the extent of the area that is considered to be impacted by inundation. This would still require the negotiation of flood easements with the owners of 29 individual parcels. No formal action has been taken in pursuit of this alternative, and numerous issues would need to be resolved in order to do so (e.g., what if not all property owners agree to participate? are the



estimated fees to be paid for every flood event? etc.). Additionally, the Program Document would need to be revised to allow flows above flood stage.

III. CONCLUSIONS

During the First Increment, the Program put considerable effort into solving the issue of flow capacity limitations at the North Platte chokepoint, but with limited success. Phragmites were treated periodically by both chemical and mechanical (e.g., disking, shredding) means, but the invasive vegetation continues to persist. Two flood-proofing projects were completed to mitigate flooding issues along the north bank with the hope of gaining capacity by raising minor flood stage. This process took nearly nine years and culminated in a test flow release in July 2020. While the flood-proofing projects performed as intended (if not better), flood impacts were instead observed on the south bank, and the NWS declined to raise the minor flood stage.

The many other alternatives considered for increasing flow capacity at the North Platte chokepoint were met with numerous obstacles: objections from affected property owners, lengthy permitting and construction times, insufficient capacity to be useful, high costs, model results indicating the opposite of what was intended, and so forth. Low-cost improvements to existing canals were considered to bypass the chokepoint by diverting water from the North Platte River to the South Platte River, but the potential capacity gained was too small to make much difference. Construction of a new canal to do the same was prohibitively expensive. The Recommended Construction Alternative evaluated by ACE was estimated to take four years to implement, but given the time it took to successfully design, permit, construct, and test the flood-proofing projects, this is surely underestimating the time required for a project that involves dredging and construction activities in the river channel and on private land. These are but a few of the problems faced. However, if any viable new solutions emerge from North Platte Chokepoint Planning Workgroup discussions, the EDO is prepared to evaluate them as needed.