

Papio-Missouri River Natural Resources District Public Hearing On Integrated Management Plan For the Lower Platte River

June 12, 2014 7:00 p.m.

AGENDA

- 1. Hearing Called to Order Chairperson Fred Conley
- 2. Appointment of Hearing Officer General Manager, John Winkler
- 3. Evidence of Proof of Publication of Hearing Notice
- 4. Explanation of the Purpose of the Hearing Paul Peters
- 5. Identification of Exhibits
- 6. Explanation of the Purpose and Scope of the Project Brian Henkel
- 7. Receive Testimony and Statements
- 8. Reception of Exhibits
- 9. Hearing Adjournment

NOTICE OF PUBLIC HEARING RELATING TO THE PAPIO-MISSOURI RIVER NATURAL RESOURCES DISTRICT AND THE NEBRASKA DEPARTMENT OF NATURAL RESOURCES INTEGRATED MANAGEMENT PLAN

Pursuant to Neb. Rev. Stat. § 46-718, the Papio-Missouri River Natural Resources District (District) and the Nebraska Department of Natural Resources (Department) hereby provide notice that the District and the Department shall hold a public hearing on June 12, 2014 at 7:00 p.m., at the District office, 8901 S. 154th Street, Omaha, NE 68138. As required by Neb. Rev. Stat. § 46-718(1), the purpose of the hearing is to take testimony on the proposed District/Department Integrated Management Plan (IMP) and the proposed controls. The geographic area for the proposed IMP and proposed controls is located in eastern Nebraska and encompasses a portion of Sarpy, Douglas, and Washington Counties. A general description of the major components of the proposed IMP is as follows: 1) introduction and authority, 2) maps of the IMP area, 3) goals and objectives, 4) action items, 5) incentive programs, 6) monitoring plan, 7) modifications to the IMP, 8) information considered in development of the plan. The proposed IMP also includes provisions for information and education, options for incentives, interagency collaboration, and municipal/non-municipal water use and accounting.

The proposed groundwater action item (control) for the District is set forth in Section 4.0 of the IMP and consists of the following action: 1) establish a limit on the expansion of groundwater-irrigated acres. The proposed surface water action item (control) for the Department is also set forth in Section 4.0 of the IMP and consists of the following action: 1) establish a limit on the expansion of surface water-irrigated acres.

Furthermore, other action items that the District and the Department will take to achieve the goals and objectives of the IMP either separately or jointly include: (1) reviewing and evaluating the P-MRNRD's Groundwater Management Plan, (2) further study of surface water and groundwater resources, (3) assessment of programs and projects to improve the availability of surface water and groundwater resources, and (4) information and education programs.

Any interested persons may appear at the hearing and present written or oral testimony concerning the proposed IMP and proposed controls. Individuals with disabilities may request auxiliary aids and service necessary for participation by contacting the District or the Department by June 5, 2014 by 5:00 p.m. Testimony or other evidence relevant to the purposes of the hearing may also be submitted in writing to the Papio-Missouri River Natural Resources District, 8901 S. 154th Street, Omaha, NE 68138, to the Department of Natural Resources, 301 Centennial Mall South, P.O. Box 94676, Lincoln, NE 68509-4676, or by electronic mail to the District at bhenkel@papionrd.org or to the Department at amy.zoller@nebraska.gov by 5:00 p.m., June 11, 2014.

For further information regarding the proposed IMP and proposed controls or for the full text of the proposed IMP and proposed controls, refer to the District website at www.papionrd.org or the Department's website at http://dnr.nebraska.gov or contact the District or the Department at the addresses listed above or contact the District at (402) 444-6222 or the Department at (402) 471-2366.

Following the public hearing on the proposed IMP and proposed controls, the District and the Department will make a joint decision within 60 days on whether to implement the proposed IMP with or without modifications and whether to adopt and implement the groundwater and surface water controls proposed in the IMP.

Memorandum

To: Board of Directors

From: Brian L. Henkel, Groundwater Management Engineer

Date: June 12, 2014

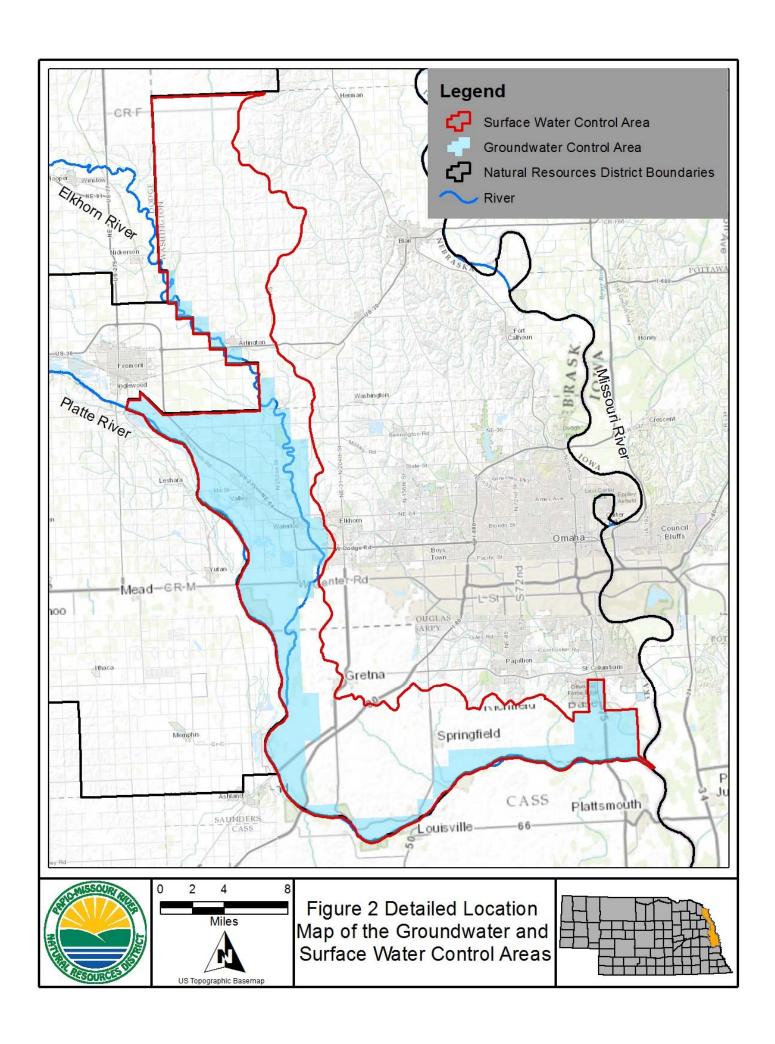
Re: Voluntary Integrated Management Plan Public Hearing

In November 2011 the District's Board of Directors voted to develop a voluntary Integrated Management Plan (IMP) for the portion of the District within the Lower Platte River Basin. A voluntary IMP is a proactive approach to the management of the water resources through cooperative planning with the Nebraska Department of Natural Resources (Department) that offers greater flexibility of management for both surface water and groundwater. Integrated management recognizes the interconnectedness of these waters and develops strategies to ensure a balance between water uses and water supplies for the long term. The District's IMP is for the area designated by the Department to have alluvial aquifers that are hydrologically connected to the Platte and Elkhorn Rivers and includes the portion of the District that contributes surface water runoff to the Platte and Elkhorn Rivers.

District staff, Department staff, and Olsson Associates assembled a Stakeholder Advisory Committee (SAC) to solicit input from water users in the Lower Platte River to determine their collective goals and objectives for the interconnected water resources. The SAC included representatives from agriculture, industry, municipal supply, environmental and recreational groups, cities, and counties as well as technical advisors from the state and federal level.

The Board adopted a set of proposed goals and objectives at their meeting on September 8, 2013. Then a set of action items was developed to guide the District and the Department toward meeting those goals and objectives. This set of goals, objectives and action items form the backbone of the IMP jointly agreed upon by the District and the Department in May 2014. This IMP, which will be the planning tool the District and the Department will use to help ensure the long term viability of the interconnected water resources of the Lower Platte River, is the subject of this public hearing.

Final adoption of this IMP, with or without changes based on testimony received, is to be accomplished within 60 days of this public hearing. Final adoption of the IMP by the District is anticipated to take place at the July 10th Board meeting, with approval by the Department to follow shortly thereafter.



GOAL 1 - Develop and implement water use policies and practices that contribute to the protection of existing surface and groundwater uses while allowing for future water development.

Objectives

- 1.1. Utilize existing policies and authorities of P-MRNRD and NDNR to address water quantity issues.
- 1.2. Minimize invasive vegetation encroachment in the river channels.
- 1.3. Identify and evaluate potential conjunctive management projects and activities within the IMP Area.

GOAL 2 - Develop and maintain a water supply and use inventory based on the best available data and analysis.

Objectives

- 2.1 Develop and implement a data gathering and monitoring plan that provides relevant scientific information to support NDNR's annual evaluation.
- 2.2 Monitor and track precipitation, consumption, inflows, and outflows.
- 2.3 Coordinate with water suppliers and other water users to understand and project future water demands.

GOAL 3 - Develop and implement water use educational programs that encourage conservation and effective water use.

Objectives

- 3.1. Promote water use education that addresses both rural and urban water conservation efforts.
- 3.2. Work with other entities on education and conservation programs.
- 3.3. Explore opportunities to reuse water, where feasible.

GOAL 4 - Work with upstream NRDs and other relevant organizations to collectively develop a water management plan for the Platte River Basin that maintains a balance between current and future water supplies and demands.

Objectives

- 4.1. Actively participate in Lower Platte River Basin water management planning activities.
- 4.2. Identify and evaluate potential conjunctive management projects and activities within the Lower Platte River Basin.
- 4.3. Identify and evaluate additional water resource supplies.
- 4.4. Coordinate with other entities in the entire Platte River Basin on water management planning and activities.
- 4.5. Work with the appropriate agencies to identify streamflow necessary to protect and maintain public water supply, fish and wildlife, and public recreation.

4.0 ACTION ITEMS

Action items were developed by the P-MRNRD and the NDNR with input from the Papio-Missouri River Stakeholder Advisory Committee. Action items provide a listing of the direct tasks to be performed as a part of this plan. They are the steps necessary to implement the plan. Action items help accomplish the objectives and move toward completion of the goals. For this reason, all but two of the action items are presented in this subsection following the goals and objectives they were written to help accomplish.

There are two specific action items that were written in order to comply with Neb. Rev. Stat. § 46-715 (2) as the regulatory groundwater and surface water action items (or controls). These two action items are presented first with further description as to their applicability across the district. In accordance with the statute, the regulatory action items (or controls) shall:

- Be consistent with the goals and objectives of the plan
- Be sufficient to ensure that the state will remain in compliance with applicable state and federal laws and with any applicable interstate water compact or decree or other formal state contract or agreement pertaining to surface water or ground water use or supplies.

Groundwater Action Item (Control)

1. Establish a limit on the expansion of groundwater-irrigated acres.

Groundwater regulatory action items (or controls) implemented by the P-MRNRD are set forth in Neb. Rev. Stat. § 46-739 and apply to the groundwater control area as shown in Figure 2 and as listed in Appendix C. The groundwater regulatory action item will work in combination with P-MRNRD's Groundwater Management Plan and Rules and Regulations. The District's Rules and Regulations will contain procedural details for the control listed in this IMP. Persons desiring to apply for new groundwater irrigated acres or to increase existing groundwater irrigated acres should contact the P-MRNRD to ensure compliance with this IMP. The limit established on the expansion of groundwater irrigated acres is for agricultural production land irrigated from a new groundwater source, typically an irrigation well, and does not include other types of irrigation use (for example, lawn watering at golf courses and ball fields), municipal use, or industrial use.

Surface Water Action Item (Control)

1. Establish a limit on the expansion of surface water-irrigated acres.

Surface water regulatory action items (or controls) implemented by the NDNR are set forth in Neb. Rev. Stat. § 46-716 and apply to the surface water control area as shown in Figure 2. NDNR will establish an annual limit on the expansion of surface water-irrigated acres. The limit on the expansion of surface water-irrigated acres shall be a maximum of one-third of the amount the P-MRNRD will allow for the expansion of groundwater-irrigated acres. NDNR will utilize the number of additional groundwater irrigated acres in place in the IMP area as of January 1 of each year for determining the number of additional acres for surface water irrigated on each calendar year. The

limit established on the expansion of surface water irrigated acres is for agricultural production land irrigated from a new surface water appropriation and does not include other types of irrigation use, municipal use, or industrial use.

This limit will only apply to land within the Surface Water Control Area illustrated in Figure 2. Should P-MRNRD issue a moratorium on any increase in groundwater-irrigated acres, NDNR will issue a similar moratorium to limit development of additional acres for surface water irrigation.

The NDNR is the State agency authorized by Nebraska statutes to regulate surface waters. All diversions of surface water require a State permit that is granted through the NDNR. To obtain a surface water permit, applicants apply through their local NDNR office.

4.1 ACTION ITEMS FOR GOAL 1

GOAL 1 - Develop and implement water use policies and practices that contribute to the protection of existing surface and groundwater uses while allowing for future water development.

Goal 1 is designed to provide for additional water resources development opportunities while protecting the existing surface and groundwater uses. To achieve the three objectives of Goal 1, the following action items will be implemented by the P-MRNRD and NDNR. The action items relate to reviewing and potentially implementing new groundwater use permitting requirements, evaluating opportunities for funding water management programs or projects, and initiating studies for additional tools such as water banking for use within the IMP Area.

OBJECTIVE 1.1 - Utilize existing policies and authorities of P-MRNRD and NDNR to address water quantity issues.

The P-MRNRD and NDNR intend to work together to ensure that they are using their authorities appropriately to manage the groundwater and surface water resources in the IMP area. Throughout this section, either the P-MRNRD or NDNR are listed as the lead for completion of the action item in parenthesis at the end of the action item. Where they are working together, the lead is listed as "Both". As water development continues, there may be a need for additional permitting requirements, for example, to avoid well conflicts that may arise should wells be located in aquifers with limited capacity. There also may be opportunities for water banking and other revenue sources to help develop the water resources while working to avoid conflicts between water users in the future.

- Action Item 1.1.1 Review and evaluate the P-MRNRD's Groundwater Management Plan relative to the goals and objectives of the IMP. (P-MRNRD)
- Action Item 1.1.2 Evaluate the need for a ranking system for new groundwater irrigation wells or expanded groundwater irrigated acres. (P-MRNRD)
- Action Item 1.1.3 Evaluate the need to require proposed new groundwater well field expansions and new large groundwater uses to perform an impact analysis. (P-MRNRD)

- Action Item 1.1.4 Assess the need to further study the Lower Platte aquifer properties, extents, and connectivity to surface water. (Both)
- Action Item 1.1.5 Assess the need for additional revenue sources to be used to fund programs and projects resulting from this IMP. (P-MRNRD)
- Action Item 1.1.6 Identify and study opportunities for the development of transfers, variances, water banking, and other actions of water management to potentially be used in the IMP Area. (Both)

OBJECTIVE 1.2 - Minimize invasive vegetation encroachment in the river channels.

Invasive species can reduce channel capacity and inhibit scouring flows that would otherwise create and improve the necessary habitat of the native species of the Platte River. Invasive species also reduce the availability of the water resources to the native plant communities through elevevated evapotranspiration. Removal of invasive vegetation helps to maintain the health of the Lower Platte Basin for the benefit of native species.

- Action Item 1.2.1 Provide financial and administrative support to weed management activities in river channels. (P-MRNRD)
- Action Item 1.2.2 Encourage removal of invasive species to improve channel conveyance. (P-MRNRD)

OBJECTIVE 1.3 - Identify and evaluate potential conjunctive management projects and activities within the IMP Area.

The P-MRNRD and NDNR may examine the potential for conjunctive management opportunities. Conjunctive management is an adaptive process that utilizes the connection between surface water and groundwater to maximize water use, while minimizing impacts to streamflow and groundwater levels. Conjunctive management is undertaken to manage the overall water supply to a region and improve the reliability of that supply.

Action Item 1.3.1 Evaluate the potential for conjunctive management programs or project opportunities to protect existing users or mitigate new uses such as water rights leases, interference agreements, augmentation projects, conjunctive use management, or use retirement. (Both)

4.2 ACTION ITEMS FOR GOAL 2

GOAL 2 - Develop and maintain a water supply and use inventory based on the best available data and analysis.

Goal 2 is designed to provide valuable water supply and use information to the P-MRNRD and NDNR. NDNR may use the inventory information gathered to support the annual evaluation for the Lower Platte River Basin. Additionally, P-MRNRD may use this information to enhance the understanding of the water supplies and uses within the IMP Area.

OBJECTIVE 2.1 - Develop and implement a data gathering and monitoring plan that provides relevant scientific information to support NDNR's annual evaluation.

Pursuant to Neb. Rev. Stat. § 46-713(1)(a) the NDNR is required to report annually its evaluation of the expected long-term availability of hydrologically connected water supplies. This evaluation will be used to monitor the effects of the action items on the IMP Area. The P-MRNRD and NDNR may collect information relative to consumptive water use, land use changes, surface water levels, groundwater levels, and hydrogeologic data to enhance the understanding of water supply and use in the IMP Area.

- Action Item 2.1.1 Identify important data components to monitor in order to ensure the best available datasets are used in the NDNR's annual evaluation. (Both)
- Action Item 2.1.2 Estimate consumptive water use utilizing the best available data and analysis tools. (Both)
- Action Item 2.1.3 Assess the need for additional monitoring and ensure information on land use changes are evaluated with respect to water use utilizing the best available data and tools. (Both)
- Action Item 2.1.4 Continue to monitor changes in streamflow and groundwater levels. (Both)
- Action Item 2.1.5 Continue to gather and analyze hydrogeologic data. (Both)

OBJECTIVE 2.2 - Monitor and track changes in precipitation, consumption, inflows, and outflows.

To best manage water supplies, a thorough understanding of the entire water cycle and how it impacts water supplies and demands is needed. Documenting water supply and use is complicated and there may need to be enhancements to the monitoring networks currently being used by the P-MRNRD and NDNR. The P-MRNRD and NDNR may collect additional information about precipitation, consumption, inflows, and outflows to enhance the hydrologic understanding of the IMP Area.

- Action Item 2.2.1 Develop or maintain a comprehensive spatial/tabular water inventory database that includes measurements or estimates of components of the water budget. (Both)
- Action Item 2.2.2 Develop or maintain science-based protocols for estimating unmeasured water uses. (Both)
- Action Item 2.2.3 Establish a system to better monitor and evaluate changes in surface water and groundwater supplies and uses. (Both)
- Action Item 2.2.4 Track variability in water use and supply by regularly evaluating data from existing surface water, groundwater, and weather monitoring networks. (Both)
- Action Item 2.2.5 Recommend changes to the Groundwater Management Plan as necessary. (P-MRNRD)

OBJECTIVE 2.3 - Coordinate with water suppliers and other water users to understand and project future water demands.

Coordination with water suppliers and users will enhance the understanding of the present and future water demand within the IMP Area. This may allow the P-MRNRD and NDNR to better anticipate future conditions that the IMP Area may experience. The data collected from water suppliers and users may also be used to refine the NDNR's annual evaluation of the expected long-term availability of hydrologically connected water supplies.

- Action Item 2.3.1 Obtain short- and long-term water use projections from municipalities. (Both)
- Action Item 2.3.2 Develop online water use form for reporting annual water use. (Both)
- Action Item 2.3.3 Investigate the need for metering for annual reporting of irrigation and other large water uses. (Both)
- Action Item 2.3.4 Evaluate the need to expand existing or develop new rural water systems (Improvement Project Areas). (P-MRNRD)
- Action Item 2.3.5 Develop estimates of water use from private, domestic, and other unmetered wells. (P-MRNRD)

4.3 ACTION ITEMS FOR GOAL 3

GOAL 3 - Develop and implement water use educational programs that encourage conservation and effective water use.

Goal 3 is designed to increase the knowledge of water conservation and effective use within the P-MRNRD. The P-MRNRD currently has education and informational programs in place and any new initiatives developed to achieve Goal 3 will be coordinated with the current programs. Some of the important educational programs include outdoor classrooms, festivals, water works, envirothon, geocaching and kids activities. Along with their own programs, the P-MRNRD may work with other organizations to help implement the educational effort. To achieve the three objectives of Goal 3, the following action items will be implemented by the P-MRNRD.

OBJECTIVE 3.1 - Promote water use education that addresses both rural and urban water conservation efforts.

The P-MRNRD may supply water conservation information through media releases, newsletters, websites, and public service announcements. The P-MRNRD will continue to support school environmental education programs that focus on wise water use. This may include providing financial support or educational materials about water use.

- Action Item 3.1.1 Continue to use existing and develop additional information and education programs that promote wise water use and conservation. (Both)
- Action Item 3.1.2 Evaluate the need for additional cost-share programs or projects to promote wise water use and conservation. (P-MRNRD)

Action Item 3.1.3 Collaborate with schools and other agencies to develop curriculum on water supplies and water conservation measures for use in classrooms. (P-MRNRD)

OBJECTIVE 3.2 - Work with other entities on education and conservation programs.

Although the P-MRNRD has successful educational programs, this objective identifies ways to work with other entities to reach a larger audience for education and conservation programs.

- Action Item 3.2.1 Coordinate with public water systems to develop or expand educational materials and programs on water supplies, water quality, and best conservation practices. (P-MRNRD)
- Action Item 3.2.2 Continue to coordinate with cities, counties, and others as they develop long-term planning activities. (P-MRNRD)
- Action Item 3.2.3 Continue to coordinate with industries, cities, and agricultural producers to promote the use of best management practices for stormwater management. (P-MRNRD)
- Action Item 3.2.4 Continue to coordinate with cities, counties, and others to encourage water education and conservation. (P-MRNRD)
- Action Item 3.2.5 Evaluate the potential for programs or projects that support the use of best management practices related to agricultural crop water management. (P-MRNRD)
- Action Item 3.2.6 Evaluate implementing urban cost-share incentive programs to encourage indoor and outdoor water conserving technology or landscaping. (P-MRNRD)

OBJECTIVE 3.3 - Explore opportunities to reuse water, where feasible.

One way to conserve water is to reuse it. Effective methods of water reuse will need to be evaluated and viable opportunities may involve collaboration with public water supply systems.

- Action Item 3.3.1 Evaluate the positive and negative effects of capturing and using waste water. (P-MRNRD)
- Action Item 3.3.2 Cooperate with public water systems to identify potential applications for reuse of treated waste water. (P-MRNRD)

4.4 ACTION ITEMS FOR GOAL 4

GOAL 4 - Work with upstream NRDs and other relevant organizations to collectively develop a water management plan for the Platte River Basin that maintains a balance between current and future water supplies and demands.

Goal four is designed to direct the P-MRNRD and NDNR to participate in water management plans for the Lower Platte River Basin and the Upper Platte River basin. The Lower Platte River basin includes all of the surface water drainage of the Loup and Elkhorn Rivers as well as their tributaries and the tributaries of the Platte River downstream of the Loup River. The Upper Platte River basin is considered to be the entire surface drainage of the Platte River and all of its tributaries upstream of the confluence with the Loup River in Columbus. To achieve the five objectives of Goal 4, the following action items will be implemented.

OBJECTIVE 4.1 - Actively participate in Lower Platte River Basin water management planning activities.

The P-MRNRD and NDNR will continue to be involved with the activities of the Lower Platte River Basin Water Management Plan Coalition (Lower Platte Coalition). The Lower Platte Coalition is charged with developing a basin wide water management plan for the Lower Platte River. Basin wide planning provides for the sharing of water use and supply data and analysis and can improve and coordinate the activities of all IMPs in the Lower Platte river. The need also exists for basin wide studies and information to improve understanding of the hydrogeology and ensure the best available data, information, and science are utulized in the planning efforts.

- Action Item 4.1.1 Cooperate on water management studies and planning with the Lower Platte River Basin Water Management Plan Coalition. (Both)
- Action Item 4.1.2 Continue to support the efforts and initiatives of the Eastern Nebraska Water Resources Assessment. (Both)

OBJECTIVE 4.2 - Identify and evaluate potential conjunctive management projects and activities within the Lower Platte River Basin.

Conjunctive management is an adaptive process that utilizes the connection between surface and groundwater to maximize water use, while minimizing impacts to streamflow and groundwater levels. Conjunctive management is undertaken to manage the overall water supply for a region and improve the reliability of that supply. The P-MRNRD and NDNR may seek out interagency partners to collaborate in studies for potential storage opportunities.

- Action Item 4.2.1 Review and analyze existing studies of water storage opportunities in the Lower Platte River Basin and conduct additional multi-agency studies as appropriate. (Both)
- Action Item 4.2.2 Evaluate the potential for conjunctive management programs or project opportunities to mitigate new uses such as water rights leases, interference agreements, augmentation projects, conjunctive use management, or use retirement. (Both)
- Action Item 4.2.3 Assess federal or statewide funding opportunities to further the goals and objectives of the IMP. (Both)

OBJECTIVE 4.3 - Identify and evaluate additional water resource supplies.

The P-MRNRD, NDNR, and other entities may jointly examine the need for required elements related to water use transfers, variances, banking, or other actions for the Platte River Basin. These actions may be considered on a case-by-case basis as the opportunities present themselves. These

types of projects could be used to help provide growth in the basin without increasing the impact to water resources.

Action Item 4.3.1 Coordinate with other entities to identify and study opportunities for the development of transfers, variances, water banking, and other actions of water management to potentially be used across the entire Platte River Basin. (Both)

OBJECTIVE 4.4 - Coordinate with other entities in the Upper Platte River Basin on water management planning and activities.

The P-MRNRD and NDNR may work with other entities in the Upper Platte River Basin, such as the Platte River Recovery Implementation Program (PRRIP). The PRRIP is an implementation program for the Upper Platte River Basin that focuses on water, land, and adaptive management. The program has three main elements; increasing stream flows in the central Platte River during relevant time periods, enhancing, restoring and protecting habitat lands for the target bird species, and accommodating certain new water-related activities. The PRRIP area is designed to provide Endangered Species Act compliance for existing and certain new water related activities throughout the Platte River basin upstream of the Loup River confluence.

Action Item 4.4.1 Work with the Platte River Recovery and Implementation Program on water management planning activities, as necessary. (Both)

OBJECTIVE 4.5 - Work with the appropriate agencies to identify streamflow necessary to protect and maintain public water supply, fish and wildlife, and public recreation.

The P-MRNRD and NDNR may work with various entities to identify minimum flow rates required by municipal, environmental, or recreational uses. Additional beneficiaries from instream flow protection may also be identified.

Action Item 4.5.1 Review and assess the benefits from instream flow protection. (Both)

5.0 INCENTIVE PROGRAMS

The P-MRNRD will evaluate the implementation of cost-share incentive programs that promote water conservation practices. For example, P-MRNRD will explore cost-share incentives for voluntary installation of flow meters on all high-capacity wells. Incentive programs may include any program authorized by state law or federal programs. Water users or landowners may be required to enter into and perform such agreements or covenants concerning the use of land or water as are necessary to produce the benefits for which the incentive program is established. Furthermore, the P-MRNRD will explore grant opportunities to supplement the annual budgeting process for funding action items. Educational and training, programs may be included with the cost-sharing and grant-funding sources.