

# Water Matters

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A guide to **integrated water management** in Nebraska

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## The Integrated Management Planning Process

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This article is intended for the general public. Anyone with interest in the integrated management planning process should find this article informative and relatively easy to understand.

Nebraska's water resources have always been integral to the state's agricultural, industrial, and municipal development. They also provide important and unique environmental and recreational benefits. A diverse set of stakeholders shares the goal of effective management of our rivers, streams, and groundwater reservoirs. Water use of those who have relied on the state's water for decades needs to be protected. New development, which is vital to the state's economic and social well-being, needs to be facilitated. With these and other factors in mind, legislation has been passed to help state and local agencies, as well as water users, develop planning documents called integrated management plans (IMPs) that will comprehensively address the unique water resources and demands of an affected area.

The integrated management planning process requires a partnership among the Department of Natural Resources (DNR) and natural resources districts (NRDs), as well as consultation and/or collaboration with water users and other stakeholders. The ultimate

goal of the process is to protect existing interests while facilitating economic growth and well-being.

When a basin is preliminarily determined to be fully appropriated by the DNR, the first step is to hold hearings at which the public is invited to provide comments and concerns. Following these hearings, the DNR makes a final determination of whether or not the basin is fully appropriated. Once designated, the integrated management planning process begins. There are several steps in the planning process, and collaboration among state agencies, water users, and other parties is required if the IMP is to be effective. The DNR and NRDs work with stakeholders to define goals and objectives, and receive input from the public through hearings. Conceptually, and by law, an IMP is always a work in progress for either maintaining a balance of the hydrologic system or regaining a balance. As the affected area changes and more data become available, an IMP must be reassessed, evolving as needed to accommodate changing circumstances, which may include hydrology, economics, water demands, and stakeholder priorities.

### **LB 962 (2004)**

LB962, which was adopted by the Nebraska Legislature in 2004, reflects the recognition that the state's water resources and use thereof required more complex management. The framework of LB962

was developed through a consensus reached by a 49-member task force appointed in 2002 by Governor Mike Johanns. The task force included representatives from each of the state's major river basins, as well as representatives from NRDs, public power districts, municipalities, agricultural organizations, recreation users, environmental interests, the public at large, the Legislature's Natural Resources Committee, the Attorney General's Office, and the DNR. The resulting bill called for a proactive approach to management of the state's hydrologically connected groundwater and surface water, providing for the economic viability, social and environmental health, safety, and welfare of the river basin. Following passage of the bill, NRDs that were already involved in an integrated management process with the DNR under previously existing laws automatically moved into the new process and were designated as fully appropriated. This included portions of the Platte, Republican, and Niobrara River Basins.

Under LB962, the DNR was required to make an overappropriated determination for any areas meeting specific criteria. Those criteria include being subject to an interstate cooperative agreement between three or more states before July 16, 2004, declaration (prior to July 16, 2004) by the DNR of a moratorium on the issuance of new surface water appropriations in the area, and request by the DNR (prior to July 16, 2004) that each NRD with jurisdiction in the affected area either (i) close or continue in effect a previously adopted closure of all or part of the area to the issuance of additional water well permits, or (ii) temporarily suspend or continue in effect a temporary suspension, pursuant to statute adopted prior to July 16, 2004, on the drilling of new water wells in the area.

### **Annual evaluation of availability of hydrologically connected water supplies**

LB962 also established the legal framework for future designations. It requires the DNR to evaluate all basins annually, and designate a basin fully appropriated when the current uses of hydrologically connected surface water and groundwater cause, or will in the reasonably foreseeable future, cause the surface water supply to be insufficient to sustain the beneficial purposes for which natural flow, storage, or instream flow appropriations, were granted. An area may also be deemed fully appropriated when the streamflow

is insufficient to sustain the long-term beneficial uses from wells constructed in aquifers dependent on recharge from the water body involved, and when reduction in the streamflow will cause noncompliance with an interstate compact or decree, other formal state contracts or agreements, or applicable state or federal laws. The DNR's annual evaluation of basins not already designated as fully or overappropriated is designed to be objective and based on scientifically accepted methods. It employs very specific definitions and formulae. The DNR has issued a report with the findings of this evaluation each year since 2006.

If the evaluation results in a preliminary determination that a basin is fully appropriated, the DNR places a stay on construction of all new water wells within the management area (termed the hydrologically connected area), with exceptions and variances allowed in some cases. When a final determination of fully appropriated is made, the DNR and NRD(s) may decide whether or not to continue these stays.

### **Develop a stakeholder group**

The first step of the integrated management planning process is to develop a stakeholder group. The stakeholder groups commonly consist of irrigation districts, reclamation districts, public power and irrigation districts, mutual irrigation companies, canal companies, municipalities, and others, as determined by the NRD and the DNR, that have a vested interest in use of water in the affected area.

Stakeholders in planning processes for fully appropriated areas consult with the DNR and NRD(s), providing feedback and ideas. Stakeholders in the overappropriated area consult and collaborate: they are directly involved with the other parties and help make important decisions. Stakeholder involvement varies widely among NRDs. Generally, stakeholders shape the IMPs in part by helping to identify priorities and vision statements, and by helping to define goals, objectives, and other important components of the IMPs.

### **DNR and NRD(s) develop goals and objectives**

Goals and objectives are developed to give the IMP direction. Their purpose is to create a balance between water uses and water supplies so that the economic viability, as well as the social and environmental health, safety, and welfare of the

affected area can be maintained, not only for the existing generation of producers and entrepreneurs, but for future generations as well.

While goals provide broad, “big picture” intentions, objectives define more specific ways to achieve these goals. For example, an IMP’s goal might be to balance water uses with water supplies while protecting the economic viability and wellbeing of the area. An objective includes the specific steps to be taken to accomplish a goal; for example, to quantify the surface water and groundwater uses in a given area.

The IMP also includes both regulatory and non-regulatory action items. For example, regulatory items might include certification of all groundwater irrigation uses and moratoriums on new water well construction permits. Non-regulatory action items might include information and education programs, as well as promotion of conservation programs.

A fully appropriated determination does not necessarily mean that existing users need to cut back, and there are no required reductions in water use unless needed for an interstate compact, decree, or agreement. Rather, the fully appropriated determination means that potential additional uses need to be carefully analyzed and understood in the context of short- and long-term planning requirements of the affected area and allowed only where consistent with the goals and objectives in the IMPs.

On the other hand, the overappropriated area is required to develop an incremental plan to balance water uses and water supplies for an ultimate return to a fully appropriated level of uses. The first ten-year increment should address the impact of streamflow depletions and the extent to which those depletions are due to water use initiated after July 1, 1997. During this increment, statute calls for the DNR and affected NRDs to pursue voluntary efforts to offset any increase in streamflow depletive effects that occur after July 1, 1997, but are caused by groundwater uses initiated prior to that date. The plan should be revised as necessary based on annual evaluations of the IMP’s effectiveness in reaching a fully appropriated condition. The goals and objectives of the overappropriated area’s plan should focus on this incremental process. The DNR is required to conduct technical analyses on available supplies, conservation practices, and the effects of the plan on reducing the overall difference between the current and fully appropriated levels

of development. This analysis helps to determine whether a second increment is needed to reach a fully appropriated condition.

After the draft goals and objectives are developed, they are presented to stakeholders for feedback. When the goals and objectives are finalized, the DNR and NRD(s) develop the IMP and present the draft to the stakeholders for feedback on analysis, alternatives, and decisions to ensure that the plan is in line with vision statements, priorities, goals, and objectives previously identified with the stakeholders.

### **DNR and NRD(s) hold hearings and adopt the plan**

Following development of the plan, the DNR holds hearing(s) as outlined in Neb. Rev. Stat. § 46-743. At least one hearing is held to take testimony prior to adoption of the IMP. Notice of the hearing(s) is published in local newspaper(s). Within 60 days after the final hearing, the DNR and NRD(s) jointly decide whether to adopt the plan as written, or to modify it prior to adoption.

After the plan is adopted, it is put into action. The DNR and NRD(s) then implement projects and studies, determine what additional projects and studies may be needed, and monitor implementation of the IMP for its success at meeting stated goals and objectives.

### **Annually review the success of the plan and determine if modifications are required**

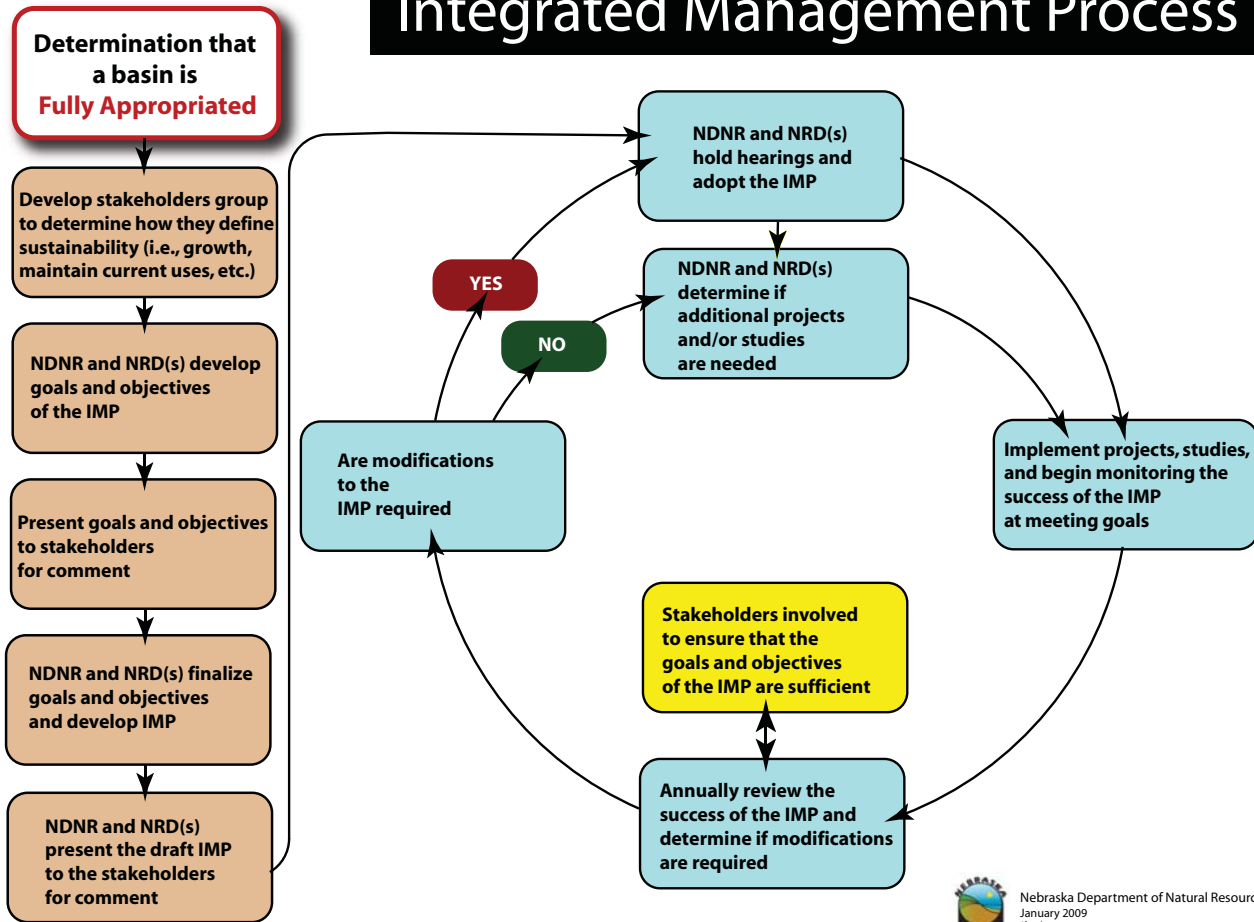
As prescribed by statute (Neb. Rev. Stat. §46-715(2)(e)), an IMP shall include a plan to gather and evaluate data, information, and methodologies used in the IMP. One aspect of this monitoring process is to test the validity of the conclusions and information upon which the IMP is based. The monitoring process allows the IMP to respond to the evolving nature of science and technology as well as the results of the management strategies employed by the IMP. It is important that the IMPs be living documents that adapt to better methodologies and data when they become available. For this reason, the monitoring and review processes are very important in creating and maintaining effective IMPs.

The DNR and NRD(s) will review the plan annually and take the appropriate course of action according to what is learned during the review process.

The public remains involved via NRD board meetings, information and education meetings, and other meetings. Additionally, stakeholders may be consulted again to ensure that the goals and objectives of the plan remain sufficient for the affected area.

When modifications to the plan are required, the necessary steps are taken to adopt the revised plan (see above section on hearings and adoption of the plan).

## Integrated Management Process



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The DNR's newsletter has covered various aspects of the integrated management process in several editions. Most recently, an article entitled, "Integrated Management Plans Update" appeared in the April 2008 edition. This article included progress updates for the NRDs across the state that are currently involved in the process. The newsletter is available at <http://www.dnr.ne.gov/dnrnews/newsarchive2.html>.



Please contact the Nebraska Department of Natural Resources with questions or concerns about this publication at 471-2900.

Visit the Integrated Water Management Division's website at <http://www.dnr.state.ne.us/LB962/LB962Implementation.html> for up-to-date information. *Water Matters* will soon be available at this website.