

## Excess flows:

Excess flows, generally speaking, are surface water conditions that exceed those required to meet current natural flow uses. Through a conjunctive management approach, the Department and NRDs aim to divert excess flows for groundwater recharge to help meet integrated management targets laid out in integrated management plans throughout the basin. Excess flow projects, which enhance streamflow or recharge groundwater, meet the criteria for use of Water Resources Cash Fund monies.

**Excess flows** are available when:

- ◆ There are no active calls for water administration.
  - ◇ All natural flow uses (irrigation, instream flow, etc.) are being satisfied.
- ◆ Daily average discharge at Grand Island is above current PRRIP target flows and instream flow requirements (See Figure 1).
- ◆ Other considerations of the Department:
  - ◇ Expected duration of the excess flows
  - ◇ Volumes of excess available
  - ◇ Projected incoming high/flood flows
  - ◇ Projected reservoir filling
  - ◇ The purpose for which Environmental Account (EA) releases are being made in accordance with the EA Annual Operating Plan
  - ◇ Icing conditions

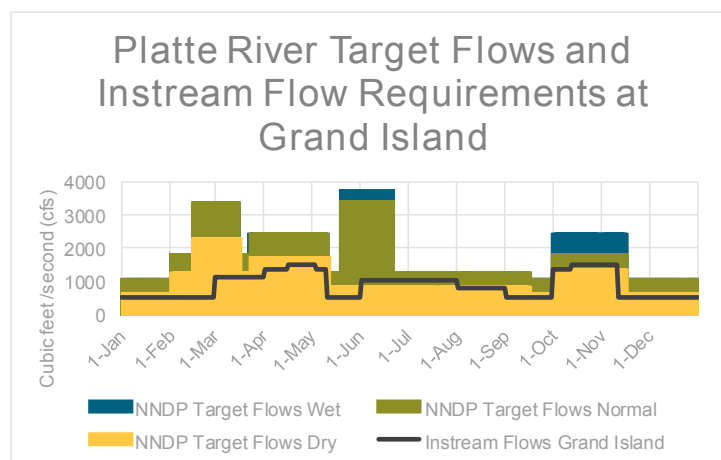


Figure 1.

<sup>1</sup> All streamflow discharges considered are based on the previous day's 24-hour average.

# **Responsibilities of Permit Holders so that Excess Flows can be Diverted for Recharge:**

**Irrigation is not allowed  
while diverting excess  
flows for recharge\***

\* Unless there is an off  
channel recharge facility

**Obtain** a recharge permit

**Adhere** to the conditions set forth in the order of approval

**Notify** the Department throughout the year at the milestones identified below:

- ♦ when canal seasoning diversions begin
- ♦ when irrigation diversions begin
- ♦ when irrigation diversions end

**Demonstrate** how proposed recharge operations (diverting excess flows) are beyond historical irrigation operations

**Send** a request to the Department when the decision is made to utilize excess flows for recharge

- ♦ A request should be sent 48 hours prior so that it can be evaluated and an opening notice can be processed

**Commence** recharge diversions once notice is received from the Department

- ♦ Permission may occur via letter, email, or other web resource

**Inform** the Department when excess flow diversion has stopped

**The Department** will be checking for compliance

# Annual Operating Plan

In the future, the Department will require an Annual Operating Plan (AOP) for excess flow diversion projects.

At a minimum, the AOP should include:

- ◆ Anticipated start date for canal “seasoning” diversions
- ◆ Anticipated start date for irrigation diversions
- ◆ Anticipated ending date for irrigation diversions
- ◆ Project facility type (canal/cell/pit/wildlife area)
- ◆ Maximum delivery rate
- ◆ Detailed plans on diverting excess flows if available
  - ◆ Amounts, Locations, Dates

Additional information may be included in the AOP to improve the project evaluation. This information may include but not be limited to:

- ◆ Engineering drawings
- ◆ Anticipated constraints
- ◆ Diversion/delivery sponsor information
- ◆ Description of instrumentation used at the project facility
- ◆ Data automation and sharing
- ◆ Groundwater monitoring

The Department will consider both the recharge permit application and AOP to evaluate excess flow projects using the Platte River Decision Support System (DSS)

Projects will be ranked according to their potential benefits using data gathered in the AOP and other known sources of information such as groundwater models.

# **Responsibilities of the Nebraska Department of Natural Resources:**

- ◆ Declare when excess flows are available.
  - ◇ This will be done via email, Gov Delivery, mail, or other web resource.
- ◆ Monitor daily streamflow, canal operations, precipitation events, and excess flow potential.
  - ◇ These data are also available to applicants via the Department streamgaging website, HPRCC, NeRAIN, PWAP run sheet portal.
  - ◇ PWAP website: <https://nednr.nebraska.gov/pwapweb/>
  - ◇ NeDNR Streamgaging website : <https://nednr.nebraska.gov/RealTime/>
- ◆ Make streamflow measurements and coordinate with the USGS to ensure that current shifts applied to the rating curve are valid.
- ◆ Operate the Platte Water Accounting Program (PWAP) daily during the irrigation season and at least bi-monthly in the non-irrigation season to determine the amount of natural flow, storage, and EA water released to the Platte River system.
- ◆ Issue opening and closing notices to administer surface water appropriations.
- ◆ Monitor all existing appropriations to ensure that each is operating within the provisions identified in their respective orders of approval for the intended purpose.
- ◆ Determine appropriate cost/reimbursement for water services that divert and recharge excess flows.