

Permit Application (*Alternate Form APA-001*)

What Is the Recharge Application Type? *Natural Flow*

Source Name (From Point of Diversion) *Western Canal from South Platte River*

Diversion Type (From Point of Diversion) *Headgate*

Diversion Structure Name (From Point of Diversion) *Western Diversion Dam*

Maximum Capacity of Canal or Delivery Works (CFS) (From Point of Diversion) *250*

Quantity Desired for Recharge Appropriation (CFS) *176.26*

What is the Minimum Operational Rate of the Canal (CFS) *20*

What is the Earliest Diversion Date? *04/01/2024*

Will This Project Be Constructed under a Federal Program, Receive Federal Funding, or Have Federal Planning Assistance? *No*

Do You Intend to Divert Water into Recharge Facilities Other than Your Canal? *Yes*

How Many Recharge Facilities Will Be Utilized under This Application? *33*

Annual Operating Plan

General System Operations (*AOP*)

Yes

No

Do You Use This System to Irrigate?

Diversion Begin Date *05/16/2024*

Diversion End Date *10/17/2024*

Delivery to Irrigators Begin Date *05/16/2024*

Delivery to Irrigators End Date *10/17/2024*

Irrigation Narrative (optional) *The diversion dates are based off of the spreadsheet attached below. These are the average first and last diversion dates as provided by the DNR Integrated water management folks. Historically there have been some acres of hay and alfalfa irrigated off of the canal. The row crop deliveries typically don't occur until later in the summer. Row crop deliveries typically end earlier than the hay deliveries as well. In a normal year, the irrigation canal generally takes water to flush the main & laterals for about 2 weeks prior to needing irrigation water. Timing is dependent on precipitation. This generally occurs around the last week of April to the first week of May. The canal does have some non-traditional row crops such as alfalfa & grass that will take a small amount of irrigation water earlier. The bulk of the irrigation occurs for corn & soybean crops, and those usually take water from late June to the first week of July and run thru September 20th. After the last round of irrigation, the canal pulls all the check boards and runs water down the canal for 10-12 days to clean out all of the piled-up sand and mud to restore the bottom of the canal to a flat surface for the next year.*

Dry Year Operations: When it is time for irrigation canals to get ready to receive water for irrigation, a lot of things need to happen. In a “perfect world” it would take a mix of fire, mechanical, and chemical means to ready the many miles of irrigation canals and laterals. Since we don’t usually see “perfect world” scenarios.....canal readiness depends on several things outside of every ditch rider’s control. Fire – an important step when trying to prepare a canal. Fire is generally the first step because it can quickly remove much of the debris that has blown in, dropped in, or was left over from the previous season, and easily burn up any vegetation growth on the bottom of the canal. Using fire is the hardest step to see accomplished with any certainty. In a dry year, fire chiefs do not want to allow burn permits for fear of fire escaping canals and causing much larger problems. To burn all that needs to burn, requires many people and lots of man hours of preparation, before and on the days to burn. If fire is used properly, it can potentially make the mechanical and chemical steps non-existent and make the process much quicker. Ultimately removing debris from the bottom of the irrigation canals can be tricky in the timing of when this should and can be done. If fire can be utilized and the debris removed early on, then mechanical and chemical means are not necessary if water can be diverted to cover the bottom of the canal. Just enough water needs to be covering the bottom of the canal so that vegetation does not regrow and slow the water down. Using chemicals is spraying unwanted vegetation. This can be used alone, or in conjunction with fire and mechanical means. The goal of removing any unwanted vegetation can be done by chemical means. If one is trying to remove any built-up debris in the canals, chemical means is not the favored solo choice. It pairs well with fire and mechanical means when used as a secondary helper option. For example, if fire is used, and then too much time has passed after then burn that vegetation has grown enough that water will not drown it out, then this will slow the flow of the water down for the rest of the season and then chemical and mechanical means may be necessary. Chemical applications require certain weather conditions to have a high kill rate and can be expensive. Mechanical means can also be expensive. Physically having someone use a mechanical device such as a weed trimmer can be very time consuming. Using mechanical devices on densely vegetative banks and bottoms of canals takes a lot of time, and a lot of people. So many irrigation canals operate on a very tight budget and have even a smaller staff to operate their systems.

Wet Year Operations: Dry year and wet year operations can be just the opposite of each other. In wet years fire, the primary option, is not available due to the weeds, debris being wet, and not burning due to some of the same problems. If it is too wet to burn, then you cannot remove the winter buildup of dried-up corn husks, sticks, branches, and anything else that blows into the canals over the winter. If it’s too wet, then the chemical option doesn’t usually work as intended and the ditch riders are left trying to mechanically remove the weeds and debris. This could mean trimming the weeds or using a backhoe and a dump truck to remove piles of debris. Equipment, fuel, and operators to run equipment all cost money, and ultimately the time to do mechanical removal is probably longer than both fire and chemical means.

Irrigation Use Uploads (Optional)

No files uploaded.

Yes

No

Do You Use This System to Generate Hydropower?

Yes

No

Do You Use This System for Storage?

Narrative for All Non-excess Flow Activities That Would Affect the Ability to Divert Excess Flows (Optional)

Partners & Sponsors


Sponsor 1

Name of Entity Paying for Recharge at this Facility *Twin Platte Natural Resources District*

Per Acre-foot Cost Basis for Recharge at This Facility *Recharged*

Max Volume per Annum *21000*

Upload Sponsor Documents

 [5 year MOA Westerm \(2018-2022\) Excess Flow Contract #1010 - Signed.pdf \[https://dssdnr.nebraska.gov/filedownload/119\]](https://dssdnr.nebraska.gov/filedownload/119)


Sponsor 2

Name of Entity Paying for Recharge at this Facility *South Platte Natural Resources District*

Per Acre-foot Cost Basis for Recharge at This Facility *Recharged*

Max Volume per Annum *8500*

Upload Sponsor Documents

 [5_year MOA Westerm \(2018-2022\) Excess Flow Contract #1010 - Signed.pdf \[https://dssdnr.nebraska.gov/filedownload/120\]](https://dssdnr.nebraska.gov/filedownload/120)

Recharge Facilities (AOP)

Western Canal

Location & Capacity

Name of Facility (If Only One Facility, This Is the Canal Name) *Western Canal*

Type of Facility *Canal*

Delivery Point Coordinates

Latitude *41.01651* **Longitude** *-102.1764*

Operational Constraints: Enter Dates or Describe in the Narrative below When Can This Facility Can Be Operated?

Begin Date of Constraints (Optional): **End Date of Constraints (Optional):**

Narrative of Constraints: Describe Details (Example: Weather Is Too Cold, so Cannot Operate the Facility) *Does not operate under prolonged freezing conditions.*

Diversion Rate from Stream (CFS)

Amount needed to be diverted in order to deliver the amount specified in the next question below. The total of the diversion values entered for all project facilities should add up to the amount to be appropriated in the application section. *176.26*

Delivery Rate (CFS)

Amount to Be delivered into the project facility from the stream diversion. If your project consists of one canal, then the value for this question should be the same as the value for the previous question. For projects where a canal delivers water to a recharge site: (the stream diversion rate) minus (the project facility delivery rate) = canal loss. *165.84*

Anticipated Maximum Annual Diversion (AF)

The upper limit of water diverted from the stream for this project facility. *19762.32*

Maximum Operational Head (FT)

For reservoirs and wetlands, how deep will the water get? For canal sections, what is the maximum height of water (head) in the canal while diversions under this application are occurring? *3.5*

Maximum Water Surface Area (Acres)

For reservoirs and wetlands, what will be the maximum water surface area corresponding to the maximum head. For canals this would be the average canal width multiplied by the canal section length where recharge will occur. *89.98*

Are Engineering Drawings Available? *No*

Partners & Sponsors

- **Twin Platte Natural Resources District** *(contract uploaded)*
- **South Platte Natural Resources District** *(contract uploaded)*

Instrumentation

Instrument 1 - Outflow

Name of Outflow Measurement Site *Western Canal Return Spill*

Geographic Coordinates of Measurement Device

Latitude *41.0816* **Longitude** *-101.768*

Recorder Type *Bubble*

Recording Increments *15 Minute*

Live Data Feed available to NeDNR? *Yes*

Instrument 2 - Inflow

Name of Inflow Measurement Site *Western Canal Diversion Gage*

Geographic Coordinates of Measurement Device

Latitude *41.01651* **Longitude** *-102.1764*

Recorder Type *Bubble*

Recording Increments *15 Minute*

Live Data Feed available to NeDNR? *Yes*

Pit 17 - P Armstrong East

Location & Capacity

Name of Facility (If Only One Facility, This Is the Canal Name) *Pit 17 - P Armstrong East*

Type of Facility *Recharge Cell*

Delivery Point Coordinates

Latitude *41.054439* **Longitude** *-101.964714*

Operational Constraints: Enter Dates or Describe in the Narrative below When Can This Facility Can Be Operated?

Begin Date of Constraints (Optional):

End Date of Constraints (Optional):

Narrative of Constraints: Describe Details (Example: Weather Is Too Cold, so Cannot Operate the Facility)

Does not operate under prolonged freezing conditons

Diversion Rate from Stream (CFS)

Amount needed to be diverted in order to deliver the amount specified in the next question below. The total of the diversion values entered for all project facilities should add up to the amount to be appropriated in the application section. 0.3

Delivery Rate (CFS)

Amount to Be delivered into the project facility from the stream diversion. If your project consists of one canal, then the value for this question should be the same as the value for the previous question. For projects where a canal delivers water to a recharge site: (the stream diversion rate) minus (the project facility delivery rate) = canal loss. 0.3

Anticipated Maximum Annual Diversion (AF)

The upper limit of water diverted from the stream for this project facility. 36

Maximum Operational Head (FT)

For reservoirs and wetlands, how deep will the water get? For canal sections, what is the maximum height of water (head) in the canal while diversions under this application are occurring? 6

Maximum Water Surface Area (Acres)

For reservoirs and wetlands, what will be the maximum water surface area corresponding to the maximum head. For canals this would be the average canal width multiplied by the canal section length where recharge will occur. 0.3

Are Engineering Drawings Available?

Yes

Partners & Sponsors

- Twin Platte Natural Resources District (contract uploaded)

Instrumentation

Instrument 1 - Inflow

Name of Inflow Measurement Site

P Armstrong - East Staff Gage

Geographic Coordinates of Measurement Device

Latitude

41.0548

Longitude

-101.9665

Recorder Type

Staff Gage

Recording Increments

Weekly

Live Data Feed available to NeDNR?

No

Pit 16 - B Armstrong #2

Location & Capacity

Name of Facility (If Only One Facility, This Is the Canal Name) *Pit 16 - B Armstrong #2*

Type of Facility *Recharge Cell*

Delivery Point Coordinates

Latitude *41.041584* **Longitude** *-101.966527*

Operational Constraints: Enter Dates or Describe in the Narrative below When Can This Facility Can Be Operated?

Begin Date of Constraints (Optional): **End Date of Constraints (Optional):**

Narrative of Constraints: Describe Details (Example: Weather Is Too Cold, so Cannot Operate the Facility) *Does not operate under prolonged freezing conditions.*

Diversion Rate from Stream (CFS)

Amount needed to be diverted in order to deliver the amount specified in the next question below. The total of the diversion values entered for all project facilities should add up to the amount to be appropriated in the application section. *1.41*

Delivery Rate (CFS)

Amount to Be delivered into the project facility from the stream diversion. If your project consists of one canal, then the value for this question should be the same as the value for the previous question. For projects where a canal delivers water to a recharge site: (the stream diversion rate) minus (the project facility delivery rate) = canal loss. *1.41*

Anticipated Maximum Annual Diversion (AF)

The upper limit of water diverted from the stream for this project facility. *168*

Maximum Operational Head (FT)

For reservoirs and wetlands, how deep will the water get? For canal sections, what is the maximum height of water (head) in the canal while diversions under this application are occurring? *4.5*

Maximum Water Surface Area (Acres)

For reservoirs and wetlands, what will be the maximum water surface area corresponding to the maximum head. For canals this would be the average canal width multiplied by the canal section length where recharge will occur. *1.4*

Are Engineering Drawings Available? *Yes*

Partners & Sponsors

- Twin Platte Natural Resources District** *(contract uploaded)*

Instrumentation

Instrument 1 - Inflow

Name of Inflow Measurement Site *B Armstrong #2 Staff Gage*

Geographic Coordinates of Measurement Device

Latitude *41.0416* **Longitude** *-101.9676*

Recorder Type *Staff Gage*

Recording Increments *Weekly*

Live Data Feed available to NeDNR? No

Pit 15 - Schilz W #5

Location & Capacity

Name of Facility (If Only One Facility, This Is the Canal Name) Pit 15 - Schilz W #5

Type of Facility Recharge Cell

Delivery Point Coordinates

Latitude 41.062148Longitude -101.893016

Operational Constraints: Enter Dates or Describe in the Narrative below When Can This Facility Can Be Operated?

Begin Date of Constraints (Optional):End Date of Constraints (Optional):

Narrative of Constraints: Describe Details (Example: Weather Is Too Cold, so Cannot Operate the Facility) Does not operate under prolonged freezing conditions.

Diversion Rate from Stream (CFS)

Amount needed to be diverted in order to deliver the amount specified in the next question below. The total of the diversion values entered for all project facilities should add up to the amount to be appropriated in the application section. 0.07

Delivery Rate (CFS)

Amount to Be delivered into the project facility from the stream diversion. If your project consists of one canal, then the value for this question should be the same as the value for the previous question. For projects where a canal delivers water to a recharge site: (the stream diversion rate) minus (the project facility delivery rate) = canal loss. 0.07

Anticipated Maximum Annual Diversion (AF)

The upper limit of water diverted from the stream for this project facility. 9

Maximum Operational Head (FT)

For reservoirs and wetlands, how deep will the water get? For canal sections, what is the maximum height of water (head) in the canal while diversions under this application are occurring? 6

Maximum Water Surface Area (Acres)

For reservoirs and wetlands, what will be the maximum water surface area corresponding to the maximum head. For canals this would be the average canal width multiplied by the canal section length where recharge will occur. 0.11

Are Engineering Drawings Available? Yes

Partners & Sponsors

- Twin Platte Natural Resources District (contract uploaded)

Instrumentation

Instrument 1 - Inflow

Name of Inflow Measurement Site Schilz #5 Staff Gage

Geographic Coordinates of Measurement Device

Latitude 41.062

Longitude -101.8942

Recorder Type Staff Gage

Recording Increments Weekly

Live Data Feed available to NeDNR? No

Pit 14 - Frates

Location & Capacity

Name of Facility (If Only One Facility, This Is the Canal Name) Pit 14 - Frates

Type of Facility Recharge Cell

Delivery Point Coordinates

Latitude 41.061451

Longitude -101.886169

Operational Constraints: Enter Dates or Describe in the Narrative below When Can This Facility Can Be Operated?

Begin Date of Constraints (Optional):

End Date of Constraints (Optional):

Narrative of Constraints: Describe Details (Example: Weather Is Too Cold, so Cannot Operate the Facility) Does not operate under prolonged freezing conditions.

Diversion Rate from Stream (CFS)

Amount needed to be diverted in order to deliver the amount specified in the next question below. The total of the diversion values entered for all project facilities should add up to the amount to be appropriated in the application section. 0.18

Delivery Rate (CFS)

Amount to Be delivered into the project facility from the stream diversion. If your project consists of one canal, then the value for this question should be the same as the value for the previous question. For projects where a canal delivers water to a recharge site: (the stream diversion rate) minus (the project facility delivery rate) = canal loss. 0.18

Anticipated Maximum Annual Diversion (AF)

The upper limit of water diverted from the stream for this project facility. 21.4

Maximum Operational Head (FT)

For reservoirs and wetlands, how deep will the water get? For canal sections, what is the maximum height of water (head) in the canal while diversions under this application are occurring? 5.5

Maximum Water Surface Area (Acres)

For reservoirs and wetlands, what will be the maximum water surface area corresponding to the maximum head. For canals this would be the average canal width multiplied by the canal section length where recharge will occur. 0.3

Are Engineering Drawings Available? Yes

Partners & Sponsors

- Twin Platte Natural Resources District (contract uploaded)

Instrumentation

Instrument 1 - Inflow

Name of Inflow Measurement Site *Frates Staff Gage*

Geographic Coordinates of Measurement Device

Latitude *41.0618* **Longitude** *-101.8906*

Recorder Type *Staff Gage*

Recording Increments *Weekly*

Live Data Feed available to NeDNR? *No*

Pit 13 - Schilz #2

Location & Capacity

Name of Facility (If Only One Facility, This Is the Canal Name) *Pit 13 - Schilz #2*

Type of Facility *Recharge Cell*

Delivery Point Coordinates

Latitude *41.077021* **Longitude** *-101.863808*

Operational Constraints: Enter Dates or Describe in the Narrative below When Can This Facility Can Be Operated?

Begin Date of Constraints (Optional): **End Date of Constraints (Optional):**

Narrative of Constraints: Describe Details (Example: Weather Is Too Cold, so Cannot Operate the Facility) *Does not operate under prolonged freezing conditions.*

Diversion Rate from Stream (CFS)

Amount needed to be diverted in order to deliver the amount specified in the next question below. The total of the diversion values entered for all project facilities should add up to the amount to be appropriated in the application section. *0.12*

Delivery Rate (CFS)

Amount to Be delivered into the project facility from the stream diversion. If your project consists of one canal, then the value for this question should be the same as the value for the previous question. For projects where a canal delivers water to a recharge site: (the stream diversion rate) minus (the project facility delivery rate) = canal loss. *0.12*

Anticipated Maximum Annual Diversion (AF)

The upper limit of water diverted from the stream for this project facility. *14.4*

Maximum Operational Head (FT)

For reservoirs and wetlands, how deep will the water get? For canal sections, what is the maximum height of water (head) in the canal while diversions under this application are occurring? *6*

Maximum Water Surface Area (Acres)

For reservoirs and wetlands, what will be the maximum water surface area corresponding to the maximum head. For canals this would be the average canal width multiplied by the canal section length where recharge will occur. *0.4*

Are Engineering Drawings Available? *Yes*

Partners & Sponsors

- **Twin Platte Natural Resources District** *(contract uploaded)*

Instrumentation

Instrument 1 - Inflow

Name of Inflow Measurement Site *Schilz #2 Staff Gage*

Geographic Coordinates of Measurement Device

Latitude *41.0772* **Longitude** *-101.8652*

Recorder Type *Staff Gage*

Recording Increments *Weekly*

Live Data Feed available to NeDNR? *No*

Pit 12 - Schilz #4

Location & Capacity

Name of Facility (If Only One Facility, This Is the Canal Name) *Pit 12 - Schilz #4*

Type of Facility *Recharge Cell*

Delivery Point Coordinates

Latitude *41.062002* **Longitude** *-101.855912*

Operational Constraints: Enter Dates or Describe in the Narrative below When Can This Facility Can Be Operated?

Begin Date of Constraints (Optional): **End Date of Constraints (Optional):**

Narrative of Constraints: Describe Details (Example: Weather Is Too Cold, so Cannot Operate the Facility) *Does not operate under prolonged freezing conditions.*

Diversion Rate from Stream (CFS)

Amount needed to be diverted in order to deliver the amount specified in the next question below. The total of the diversion values entered for all project facilities should add up to the amount to be appropriated in the application section. 0.2

Delivery Rate (CFS)

Amount to Be delivered into the project facility from the stream diversion. If your project consists of one canal, then the value for this question should be the same as the value for the previous question. For projects where a canal delivers water to a recharge site: (the stream diversion rate) minus (the project facility delivery rate) = canal loss. 0.2

Anticipated Maximum Annual Diversion (AF)

The upper limit of water diverted from the stream for this project facility. 24

Maximum Operational Head (FT)

For reservoirs and wetlands, how deep will the water get? For canal sections, what is the maximum height of water (head) in the canal while diversions under this application are occurring? 7

Maximum Water Surface Area (Acres)

For reservoirs and wetlands, what will be the maximum water surface area corresponding to the maximum head. For canals this would be the average canal width multiplied by the canal section length where recharge will occur. 0.2

Are Engineering Drawings Available?

Yes

Partners & Sponsors

- Twin Platte Natural Resources District *(contract uploaded)*

Instrumentation

Instrument 1 - Inflow

Name of Inflow Measurement Site

Schilz #2 Staff Gage

Geographic Coordinates of Measurement Device

Latitude

41.062

Longitude

-101.8577

Recorder Type

Staff Gage

Recording Increments

Daily

Live Data Feed available to NeDNR?

No

Pit 11 - Schilz #3

Location & Capacity

Name of Facility (If Only One Facility, This Is the Canal Name)

Pit 11 - Schilz #3

Type of Facility

Recharge Cell

Delivery Point Coordinates

Latitude

41.0639

Longitude

-101.849818

Operational Constraints: Enter Dates or Describe in the Narrative below When Can This Facility Can Be Operated?

Begin Date of Constraints (Optional):

End Date of Constraints (Optional):

Narrative of Constraints: Describe Details (Example: Weather Is Too Cold, so Cannot Operate the Facility)

Does not operate under prolonged freezing conditions.

Diversion Rate from Stream (CFS)

Amount needed to be diverted in order to deliver the amount specified in the next question below. The total of the diversion values entered for all project facilities should add up to the amount to be appropriated in the application section. 0.16

Delivery Rate (CFS)

Amount to Be delivered into the project facility from the stream diversion. If your project consists of one canal, then the value for this question should be the same as the value for the previous question. For projects where a canal delivers water to a recharge site: (the stream diversion rate) minus (the project facility delivery rate) = canal loss. 0.16

Anticipated Maximum Annual Diversion (AF)

The upper limit of water diverted from the stream for this project facility. 19.2

Maximum Operational Head (FT)

For reservoirs and wetlands, how deep will the water get? For canal sections, what is the maximum height of water (head) in the canal while diversions under this application are occurring? 6.5

Maximum Water Surface Area (Acres)

For reservoirs and wetlands, what will be the maximum water surface area corresponding to the maximum head. For canals this would be the average canal width multiplied by the canal section length where recharge will occur. 0.16

Are Engineering Drawings Available?

Yes

Partners & Sponsors

- Twin Platte Natural Resources District (contract uploaded)

Instrumentation

Instrument 1 - Inflow

Name of Inflow Measurement Site

Schilz # 3 Staff Gage

Geographic Coordinates of Measurement Device

Latitude

41.0639

Longitude

-101.8505

Recorder Type

Staff Gage

Recording Increments

Weekly

Live Data Feed available to NeDNR?

No

Pit 10 - Schilz #6

Location & Capacity

Name of Facility (If Only One Facility, This Is the Canal Name)

Pit 10 - Schilz #6

Type of Facility

Recharge Cell

Delivery Point Coordinates

Latitude

41.065688

Longitude

-101.840228

Operational Constraints: Enter Dates or Describe in the Narrative below When Can This Facility Can Be Operated?

Begin Date of Constraints (Optional):

End Date of Constraints (Optional):

Narrative of Constraints: Describe Details (Example: Weather Is Too Cold, so Cannot Operate the Facility)

Does not operate under prolonged freezing conditions.

Diversion Rate from Stream (CFS)

Amount needed to be diverted in order to deliver the amount specified in the next question below. The total of the diversion values entered for all project facilities should add up to the amount to be appropriated in the application section. 0.05

Delivery Rate (CFS)

Amount to Be delivered into the project facility from the stream diversion. If your project consists of one canal, then the value for this question should be the same as the value for the previous question. For projects where a canal delivers water to a recharge site: (the stream diversion rate) minus (the project facility delivery rate) = canal loss. 0.05

Anticipated Maximum Annual Diversion (AF)

The upper limit of water diverted from the stream for this project facility. 5.76

Maximum Operational Head (FT)

For reservoirs and wetlands, how deep will the water get? For canal sections, what is the maximum height of water (head) in the canal while diversions under this application are occurring? 5.5

Maximum Water Surface Area (Acres)

For reservoirs and wetlands, what will be the maximum water surface area corresponding to the maximum head. For canals this would be the average canal width multiplied by the canal section length where recharge will occur. 0.16

Are Engineering Drawings Available?

Yes

Partners & Sponsors

- Twin Platte Natural Resources District (contract uploaded)

Instrumentation

Instrument 1 - Inflow

Name of Inflow Measurement Site

Schilz #6 Staff Gage

Geographic Coordinates of Measurement Device

Latitude 41.0657

Longitude -101.8409

Recorder Type

Staff Gage

Recording Increments

Weekly

Live Data Feed available to NeDNR?

No

Pit 9 - Schilz # 1

Location & Capacity

Name of Facility (If Only One Facility, This Is the Canal Name) *Pit 9 - Schilz # 1*

Type of Facility *Recharge Cell*

Delivery Point Coordinates

Latitude *41.068768* **Longitude** *-101.835378*

Operational Constraints: Enter Dates or Describe in the Narrative below When Can This Facility Can Be Operated?

Begin Date of Constraints (Optional): **End Date of Constraints (Optional):**

Narrative of Constraints: Describe Details (Example: Weather Is Too Cold, so Cannot Operate the Facility) *Does not operate under prolonged freezing conditions.*

Diversion Rate from Stream (CFS)
Amount needed to be diverted in order to deliver the amount specified in the next question below. The total of the diversion values entered for all project facilities should add up to the amount to be appropriated in the application section. *0.05*

Delivery Rate (CFS)
Amount to Be delivered into the project facility from the stream diversion. If your project consists of one canal, then the value for this question should be the same as the value for the previous question. For projects where a canal delivers water to a recharge site: (the stream diversion rate) minus (the project facility delivery rate) = canal loss. *0.05*

Anticipated Maximum Annual Diversion (AF)
The upper limit of water diverted from the stream for this project facility. *6.12*

Maximum Operational Head (FT)
For reservoirs and wetlands, how deep will the water get? For canal sections, what is the maximum height of water (head) in the canal while diversions under this application are occurring? *6.5*

Maximum Water Surface Area (Acres)
For reservoirs and wetlands, what will be the maximum water surface area corresponding to the maximum head. For canals this would be the average canal width multiplied by the canal section length where recharge will occur. *0.17*

Are Engineering Drawings Available? *Yes*

Partners & Sponsors

- Twin Platte Natural Resources District** *(contract uploaded)*

Instrumentation

Instrument 1 - Inflow

Name of Inflow Measurement Site *Schilz # 1 Staff Gage*

Geographic Coordinates of Measurement Device

Latitude *41.0688* **Longitude** *-101.8368*

Recorder Type *Staff Gage*

Recording Increments *Weekly*

Live Data Feed available to NeDNR? No

Pit 8 - Flaming #2

Location & Capacity

Name of Facility (If Only One Facility, This Is the Canal Name) Pit 8 - Flaming #2

Type of Facility Recharge Cell

Delivery Point Coordinates

Latitude 41.076328Longitude -101.835283

Operational Constraints: Enter Dates or Describe in the Narrative below When Can This Facility Can Be Operated?

Begin Date of Constraints (Optional):End Date of Constraints (Optional):

Narrative of Constraints: Describe Details (Example: Weather Is Too Cold, so Cannot Operate the Facility) Does not operate under prolonged freezing conditions.

Diversion Rate from Stream (CFS)

Amount needed to be diverted in order to deliver the amount specified in the next question below. The total of the diversion values entered for all project facilities should add up to the amount to be appropriated in the application section. 0.24

Delivery Rate (CFS)

Amount to Be delivered into the project facility from the stream diversion. If your project consists of one canal, then the value for this question should be the same as the value for the previous question. For projects where a canal delivers water to a recharge site: (the stream diversion rate) minus (the project facility delivery rate) = canal loss. 0.24

Anticipated Maximum Annual Diversion (AF)

The upper limit of water diverted from the stream for this project facility. 28.8

Maximum Operational Head (FT)

For reservoirs and wetlands, how deep will the water get? For canal sections, what is the maximum height of water (head) in the canal while diversions under this application are occurring? 5

Maximum Water Surface Area (Acres)

For reservoirs and wetlands, what will be the maximum water surface area corresponding to the maximum head. For canals this would be the average canal width multiplied by the canal section length where recharge will occur. 0.8

Are Engineering Drawings Available? Yes

Partners & Sponsors

- Twin Platte Natural Resources District (contract uploaded)

Instrumentation

Instrument 1 - Inflow

Name of Inflow Measurement Site Flaming # 2 Staff Gage

Geographic Coordinates of Measurement Device

Latitude 41.0759

Longitude -101.8377

Recorder Type Staff Gage

Recording Increments Weekly

Live Data Feed available to NeDNR? No

Pit 7 - Flaming #1

Location & Capacity

Name of Facility (If Only One Facility, This Is the Canal Name) Pit 7 - Flaming #1

Type of Facility Recharge Cell

Delivery Point Coordinates

Latitude 41.069734

Longitude -101.826519

Operational Constraints: Enter Dates or Describe in the Narrative below When Can This Facility Can Be Operated?

Begin Date of Constraints (Optional):

End Date of Constraints (Optional):

Narrative of Constraints: Describe Details (Example: Weather Is Too Cold, so Cannot Operate the Facility) Does not operate under prolonged freezing conditions.

Diversion Rate from Stream (CFS)

Amount needed to be diverted in order to deliver the amount specified in the next question below. The total of the diversion values entered for all project facilities should add up to the amount to be appropriated in the application section. 0.06

Delivery Rate (CFS)

Amount to Be delivered into the project facility from the stream diversion. If your project consists of one canal, then the value for this question should be the same as the value for the previous question. For projects where a canal delivers water to a recharge site: (the stream diversion rate) minus (the project facility delivery rate) = canal loss. 0.06

Anticipated Maximum Annual Diversion (AF)

The upper limit of water diverted from the stream for this project facility. 7.2

Maximum Operational Head (FT)

For reservoirs and wetlands, how deep will the water get? For canal sections, what is the maximum height of water (head) in the canal while diversions under this application are occurring? 6.5

Maximum Water Surface Area (Acres)

For reservoirs and wetlands, what will be the maximum water surface area corresponding to the maximum head. For canals this would be the average canal width multiplied by the canal section length where recharge will occur. 0.2

Are Engineering Drawings Available? Yes

Partners & Sponsors

- Twin Platte Natural Resources District (contract uploaded)

Instrumentation

Instrument 1 - Inflow

Name of Inflow Measurement Site *Flaming #1 Staff Gage*

Geographic Coordinates of Measurement Device

Latitude *41.07* **Longitude** *-101.8283*

Recorder Type *Staff Gage*

Recording Increments *Weekly*

Live Data Feed available to NeDNR? *No*

Pit 6 - Schilz East of Feedlot

Location & Capacity

Name of Facility (If Only One Facility, This Is the Canal Name) *Pit 6 - Schilz East of Feedlot*

Type of Facility *Recharge Cell*

Delivery Point Coordinates

Latitude *41.085719* **Longitude** *-101.826696*

Operational Constraints: Enter Dates or Describe in the Narrative below When Can This Facility Can Be Operated?

Begin Date of Constraints (Optional): **End Date of Constraints (Optional):**

Narrative of Constraints: Describe Details (Example: Weather Is Too Cold, so Cannot Operate the Facility) *Does not operate under prolonged freezing conditions.*

Diversion Rate from Stream (CFS)

Amount needed to be diverted in order to deliver the amount specified in the next question below. The total of the diversion values entered for all project facilities should add up to the amount to be appropriated in the application section. *0.3*

Delivery Rate (CFS)

Amount to Be delivered into the project facility from the stream diversion. If your project consists of one canal, then the value for this question should be the same as the value for the previous question. For projects where a canal delivers water to a recharge site: (the stream diversion rate) minus (the project facility delivery rate) = canal loss. *0.3*

Anticipated Maximum Annual Diversion (AF)

The upper limit of water diverted from the stream for this project facility. *36*

Maximum Operational Head (FT)

For reservoirs and wetlands, how deep will the water get? For canal sections, what is the maximum height of water (head) in the canal while diversions under this application are occurring? *4.5*

Maximum Water Surface Area (Acres)

For reservoirs and wetlands, what will be the maximum water surface area corresponding to the maximum head. For canals this would be the average canal width multiplied by the canal section length where recharge will occur. *3*

Are Engineering Drawings Available? *Yes*

Partners & Sponsors

- Twin Platte Natural Resources District** *(contract uploaded)*

Instrumentation

Instrument 1 - Inflow

Name of Inflow Measurement Site *Schilz East of Feedlot Staff Gage*

Geographic Coordinates of Measurement Device

Latitude *41.086* **Longitude** *-101.8285*

Recorder Type *Staff Gage*

Recording Increments *Weekly*

Live Data Feed available to NeDNR? *No*

Pit 5 - Flaming Home #2 (Wright)

Location & Capacity

Name of Facility (If Only One Facility, This Is the Canal Name) *Pit 5 - Flaming Home #2 (Wright)*

Type of Facility *Recharge Cell*

Delivery Point Coordinates

Latitude *41.087098* **Longitude** *-101.815828*

Operational Constraints: Enter Dates or Describe in the Narrative below When Can This Facility Can Be Operated?

Begin Date of Constraints (Optional): **End Date of Constraints (Optional):**

Narrative of Constraints: Describe Details (Example: Weather Is Too Cold, so Cannot Operate the Facility) *Does not operate under prolonged freezing conditions.*

Diversion Rate from Stream (CFS)

Amount needed to be diverted in order to deliver the amount specified in the next question below. The total of the diversion values entered for all project facilities should add up to the amount to be appropriated in the application section. *0.27*

Delivery Rate (CFS)

Amount to Be delivered into the project facility from the stream diversion. If your project consists of one canal, then the value for this question should be the same as the value for the previous question. For projects where a canal delivers water to a recharge site: (the stream diversion rate) minus (the project facility delivery rate) = canal loss. *0.27*

Anticipated Maximum Annual Diversion (AF)

The upper limit of water diverted from the stream for this project facility. *32.4*

Maximum Operational Head (FT)

For reservoirs and wetlands, how deep will the water get? For canal sections, what is the maximum height of water (head) in the canal while diversions under this application are occurring? 5

Maximum Water Surface Area (Acres)

For reservoirs and wetlands, what will be the maximum water surface area corresponding to the maximum head. For canals this would be the average canal width multiplied by the canal section length where recharge will occur. 0.9

Are Engineering Drawings Available?

Yes

Partners & Sponsors

- Twin Platte Natural Resources District *(contract uploaded)*

Instrumentation

Instrument 1 - Inflow

Name of Inflow Measurement Site

Flaming Home #2 (Wright) Staff Gage

Geographic Coordinates of Measurement Device

Latitude

41.0867

Longitude

-101.8172

Recorder Type

Staff Gage

Recording Increments

Weekly

Live Data Feed available to NeDNR?

No

Pit 4 - Flaming Home (Wright)

Location & Capacity

Name of Facility (If Only One Facility, This Is the Canal Name)

Pit 4 - Flaming Home (Wright)

Type of Facility

Recharge Cell

Delivery Point Coordinates

Latitude

41.085253

Longitude

-101.806067

Operational Constraints: Enter Dates or Describe in the Narrative below When Can This Facility Can Be Operated?

Begin Date of Constraints (Optional):

End Date of Constraints (Optional):

Narrative of Constraints: Describe Details (Example: Weather Is Too Cold, so Cannot Operate the Facility)

Does not operate under prolonged freezing conditions.

Diversion Rate from Stream (CFS)

Amount needed to be diverted in order to deliver the amount specified in the next question below. The total of the diversion values entered for all project facilities should add up to the amount to be appropriated in the application section. 0.15

Delivery Rate (CFS)

Amount to Be delivered into the project facility from the stream diversion. If your project consists of one canal, then the value for this question should be the same as the value for the previous question. For projects where a canal delivers water to a recharge site: (the stream diversion rate) minus (the project facility delivery rate) = canal loss. 0.15

Anticipated Maximum Annual Diversion (AF)

The upper limit of water diverted from the stream for this project facility. 18

Maximum Operational Head (FT)

For reservoirs and wetlands, how deep will the water get? For canal sections, what is the maximum height of water (head) in the canal while diversions under this application are occurring? 4.5

Maximum Water Surface Area (Acres)

For reservoirs and wetlands, what will be the maximum water surface area corresponding to the maximum head. For canals this would be the average canal width multiplied by the canal section length where recharge will occur. 0.5

Are Engineering Drawings Available?

Yes

Partners & Sponsors

- Twin Platte Natural Resources District (contract uploaded)

Instrumentation

Instrument 1 - Inflow

Name of Inflow Measurement Site

Flaming Home (Wright) Staff Gage

Geographic Coordinates of Measurement Device

Latitude

41.0866

Longitude

-101.8102

Recorder Type

Staff Gage

Recording Increments

Weekly

Live Data Feed available to NeDNR?

No

Pit 3 - Svoboda

Location & Capacity

Name of Facility (If Only One Facility, This Is the Canal Name)

Pit 3 - Svoboda

Type of Facility

Recharge Cell

Delivery Point Coordinates

Latitude

41.075984

Longitude

-101.804206

Operational Constraints: Enter Dates or Describe in the Narrative below When Can This Facility Can Be Operated?

Begin Date of Constraints (Optional):

End Date of Constraints (Optional):

Narrative of Constraints: Describe Details (Example: Weather Is Too Cold, so Cannot Operate the Facility)

Does not operate under prolonged freezing conditions.

Diversion Rate from Stream (CFS)

Amount needed to be diverted in order to deliver the amount specified in the next question below. The total of the diversion values entered for all project facilities should add up to the amount to be appropriated in the application section. 0.2

Delivery Rate (CFS)

Amount to Be delivered into the project facility from the stream diversion. If your project consists of one canal, then the value for this question should be the same as the value for the previous question. For projects where a canal delivers water to a recharge site: (the stream diversion rate) minus (the project facility delivery rate) = canal loss. 0.2

Anticipated Maximum Annual Diversion (AF)

The upper limit of water diverted from the stream for this project facility. 24

Maximum Operational Head (FT)

For reservoirs and wetlands, how deep will the water get? For canal sections, what is the maximum height of water (head) in the canal while diversions under this application are occurring? 4.5

Maximum Water Surface Area (Acres)

For reservoirs and wetlands, what will be the maximum water surface area corresponding to the maximum head. For canals this would be the average canal width multiplied by the canal section length where recharge will occur. 1.9

Are Engineering Drawings Available?

Yes

Partners & Sponsors

- Twin Platte Natural Resources District (contract uploaded)

Instrumentation

Instrument 1 - Inflow

Name of Inflow Measurement Site

Svoboda Staff Gage

Geographic Coordinates of Measurement Device

Latitude 41.0755

Longitude -101.8055

Recorder Type

Staff Gage

Recording Increments

Weekly

Live Data Feed available to NeDNR?

No

Pit 2 - Western Canal Pit

Location & Capacity

Name of Facility (If Only One Facility, This Is the Canal Name) *Pit 2 - Western Canal Pit*

Type of Facility *Recharge Cell*

Delivery Point Coordinates

Latitude *41.077602* **Longitude** *-101.790674*

Operational Constraints: Enter Dates or Describe in the Narrative below When Can This Facility Can Be Operated?

Begin Date of Constraints (Optional): **End Date of Constraints (Optional):**

Narrative of Constraints: Describe Details (Example: Weather Is Too Cold, so Cannot Operate the Facility) *Does not operate under prolonged freezing conditions.*

Diversion Rate from Stream (CFS)
Amount needed to be diverted in order to deliver the amount specified in the next question below. The total of the diversion values entered for all project facilities should add up to the amount to be appropriated in the application section. *0.28*

Delivery Rate (CFS)
Amount to Be delivered into the project facility from the stream diversion. If your project consists of one canal, then the value for this question should be the same as the value for the previous question. For projects where a canal delivers water to a recharge site: (the stream diversion rate) minus (the project facility delivery rate) = canal loss. *0.28*

Anticipated Maximum Annual Diversion (AF)
The upper limit of water diverted from the stream for this project facility. *33.6*

Maximum Operational Head (FT)
For reservoirs and wetlands, how deep will the water get? For canal sections, what is the maximum height of water (head) in the canal while diversions under this application are occurring? *4*

Maximum Water Surface Area (Acres)
For reservoirs and wetlands, what will be the maximum water surface area corresponding to the maximum head. For canals this would be the average canal width multiplied by the canal section length where recharge will occur. *2.8*

Are Engineering Drawings Available? *Yes*

Partners & Sponsors

- Twin Platte Natural Resources District** *(contract uploaded)*

Instrumentation

Instrument 1 - Inflow

Name of Inflow Measurement Site *Western Canal Pit Staff Gage*

Geographic Coordinates of Measurement Device

Latitude *41.0773* **Longitude** *-101.7933*

Recorder Type *Staff Gage*

Recording Increments *Weekly*

Live Data Feed available to NeDNR? No

Pit 1 - Flaming Interstate

Location & Capacity

Name of Facility (If Only One Facility, This Is the Canal Name) Pit 1 - Flaming Interstate

Type of Facility Recharge Cell

Delivery Point Coordinates

Latitude 41.097721Longitude -101.790212

Operational Constraints: Enter Dates or Describe in the Narrative below When Can This Facility Can Be Operated?

Begin Date of Constraints (Optional):End Date of Constraints (Optional):

Narrative of Constraints: Describe Details (Example: Weather Is Too Cold, so Cannot Operate the Facility) Does not operate under prolonged freezing conditions.

Diversion Rate from Stream (CFS)

Amount needed to be diverted in order to deliver the amount specified in the next question below. The total of the diversion values entered for all project facilities should add up to the amount to be appropriated in the application section. 0.71

Delivery Rate (CFS)

Amount to Be delivered into the project facility from the stream diversion. If your project consists of one canal, then the value for this question should be the same as the value for the previous question. For projects where a canal delivers water to a recharge site: (the stream diversion rate) minus (the project facility delivery rate) = canal loss. 0.71

Anticipated Maximum Annual Diversion (AF)

The upper limit of water diverted from the stream for this project facility. 84

Maximum Operational Head (FT)

For reservoirs and wetlands, how deep will the water get? For canal sections, what is the maximum height of water (head) in the canal while diversions under this application are occurring? 6.5

Maximum Water Surface Area (Acres)

For reservoirs and wetlands, what will be the maximum water surface area corresponding to the maximum head. For canals this would be the average canal width multiplied by the canal section length where recharge will occur. 0.7

Are Engineering Drawings Available? Yes

Partners & Sponsors

- Twin Platte Natural Resources District (contract uploaded)

Instrumentation

Instrument 1 - Inflow

Name of Inflow Measurement Site Flaming Interstate Staff Gage

Pit 18 - P Armstrong W

Location & Capacity

Name of Facility (If Only One Facility, This Is the Canal Name) *Pit 18 - P Armstrong W*

Type of Facility *Recharge Cell*

Delivery Point Coordinates

Latitude *41.054427* Longitude *-101.976651*

Operational Constraints: Enter Dates or Describe in the Narrative below When Can This Facility Can Be Operated?

Begin Date of Constraints (Optional): End Date of Constraints (Optional):

Narrative of Constraints: Describe Details (Example: Weather Is Too Cold, so Cannot Operate the Facility) *Does not operate under prolonged freezing conditions.*

Diversion Rate from Stream (CFS)

Amount needed to be diverted in order to deliver the amount specified in the next question below. The total of the diversion values entered for all project facilities should add up to the amount to be appropriated in the application section. *0.21*

Delivery Rate (CFS)

Amount to Be delivered into the project facility from the stream diversion. If your project consists of one canal, then the value for this question should be the same as the value for the previous question. For projects where a canal delivers water to a recharge site: (the stream diversion rate) minus (the project facility delivery rate) = canal loss. *0.21*

Anticipated Maximum Annual Diversion (AF)

The upper limit of water diverted from the stream for this project facility. *25.2*

Maximum Operational Head (FT)

For reservoirs and wetlands, how deep will the water get? For canal sections, what is the maximum height of water (head) in the canal while diversions under this application are occurring? *5*

Maximum Water Surface Area (Acres)

For reservoirs and wetlands, what will be the maximum water surface area corresponding to the maximum head. For canals this would be the average canal width multiplied by the canal section length where recharge will occur. *0.7*

Are Engineering Drawings Available? *Yes*

Partners & Sponsors

- **Twin Platte Natural Resources District** *(contract uploaded)*

Instrumentation

Instrument 1 - Inflow

Name of Inflow Measurement Site *P Armstrong W Staff Gage*

Geographic Coordinates of Measurement Device

Latitude *41.0545* **Longitude** *-101.9778*

Recorder Type *Staff Gage*

Recording Increments *Weekly*

Live Data Feed available to NeDNR? *No*

Pit 19 - B Armstrong #1

Location & Capacity

Name of Facility (If Only One Facility, This Is the Canal Name) *Pit 19 - B Armstrong #1*

Type of Facility *Recharge Cell*

Delivery Point Coordinates

Latitude *41.047158* **Longitude** *-101.975795*

Operational Constraints: Enter Dates or Describe in the Narrative below When Can This Facility Can Be Operated?

Begin Date of Constraints (Optional): **End Date of Constraints (Optional):**

Narrative of Constraints: Describe Details (Example: Weather Is Too Cold, so Cannot Operate the Facility) *Does not operate under prolonged freezing conditions.*

Diversion Rate from Stream (CFS)

Amount needed to be diverted in order to deliver the amount specified in the next question below. The total of the diversion values entered for all project facilities should add up to the amount to be appropriated in the application section. *0.3*

Delivery Rate (CFS)

Amount to Be delivered into the project facility from the stream diversion. If your project consists of one canal, then the value for this question should be the same as the value for the previous question. For projects where a canal delivers water to a recharge site: (the stream diversion rate) minus (the project facility delivery rate) = canal loss. *0.3*

Anticipated Maximum Annual Diversion (AF)

The upper limit of water diverted from the stream for this project facility. *36*

Maximum Operational Head (FT)

For reservoirs and wetlands, how deep will the water get? For canal sections, what is the maximum height of water (head) in the canal while diversions under this application are occurring? *7*

Maximum Water Surface Area (Acres)

For reservoirs and wetlands, what will be the maximum water surface area corresponding to the maximum head. For canals this would be the average canal width multiplied by the canal section length where recharge will occur. *0.3*

Are Engineering Drawings Available? *Yes*

Partners & Sponsors

- **Twin Platte Natural Resources District** *(contract uploaded)*

Instrumentation

Instrument 1 - Inflow

Name of Inflow Measurement Site *B Armstrong #1 Staff Gage*

Geographic Coordinates of Measurement Device

Latitude *41.0472* **Longitude** *-101.9763*

Recorder Type *Staff Gage*

Recording Increments *Weekly*

Live Data Feed available to NeDNR? *No*

SPNRD #1

Location & Capacity

Name of Facility (If Only One Facility, This Is the Canal Name) *SPNRD #1*

Type of Facility *Recharge Cell*

Delivery Point Coordinates

Latitude *41.01969* **Longitude** *-102.161833*

Operational Constraints: Enter Dates or Describe in the Narrative below When Can This Facility Can Be Operated?

Begin Date of Constraints (Optional): **End Date of Constraints (Optional):**

Narrative of Constraints: Describe Details (Example: Weather Is Too Cold, so Cannot Operate the Facility) *pit cannot be operated when weather is too cold*

Diversion Rate from Stream (CFS)

Amount needed to be diverted in order to deliver the amount specified in the next question below. The total of the diversion values entered for all project facilities should add up to the amount to be appropriated in the application section. *0.11*

Delivery Rate (CFS)

Amount to Be delivered into the project facility from the stream diversion. If your project consists of one canal, then the value for this question should be the same as the value for the previous question. For projects where a canal delivers water to a recharge site: (the stream diversion rate) minus (the project facility delivery rate) = canal loss. *0.11*

Anticipated Maximum Annual Diversion (AF)

The upper limit of water diverted from the stream for this project facility. *12.6*

Maximum Operational Head (FT)

For reservoirs and wetlands, how deep will the water get? For canal sections, what is the maximum height of water (head) in the canal while diversions under this application are occurring? 9

Maximum Water Surface Area (Acres)

For reservoirs and wetlands, what will be the maximum water surface area corresponding to the maximum head. For canals this would be the average canal width multiplied by the canal section length where recharge will occur. 0.64

Are Engineering Drawings Available?

Yes

Partners & Sponsors

- South Platte Natural Resources District *(contract uploaded)*

Instrumentation

Instrument 1 - Inflow

Name of Inflow Measurement Site

Harris

Geographic Coordinates of Measurement Device

Latitude

41.01969

Longitude

-102.161833

Recorder Type

Staff Gage

Recording Increments

Daily

Live Data Feed available to NeDNR?

No

SPNRD #2

Location & Capacity

Name of Facility (If Only One Facility, This Is the Canal Name)

SPNRD #2

Type of Facility

Recharge Cell

Delivery Point Coordinates

Latitude

41.015346

Longitude

-102.143596

Operational Constraints: Enter Dates or Describe in the Narrative below When Can This Facility Can Be Operated?

Begin Date of Constraints (Optional):

End Date of Constraints (Optional):

Narrative of Constraints: Describe Details (Example: Weather Is Too Cold, so Cannot Operate the Facility)

pit cannot be operated when weather is too cold

Diversion Rate from Stream (CFS)

Amount needed to be diverted in order to deliver the amount specified in the next question below. The total of the diversion values entered for all project facilities should add up to the amount to be appropriated in the application section. 0.16

Delivery Rate (CFS)

Amount to Be delivered into the project facility from the stream diversion. If your project consists of one canal, then the value for this question should be the same as the value for the previous question. For projects where a canal delivers water to a recharge site: (the stream diversion rate) minus (the project facility delivery rate) = canal loss. 0.16

Anticipated Maximum Annual Diversion (AF)

The upper limit of water diverted from the stream for this project facility. 18.6

Maximum Operational Head (FT)

For reservoirs and wetlands, how deep will the water get? For canal sections, what is the maximum height of water (head) in the canal while diversions under this application are occurring? 9

Maximum Water Surface Area (Acres)

For reservoirs and wetlands, what will be the maximum water surface area corresponding to the maximum head. For canals this would be the average canal width multiplied by the canal section length where recharge will occur. 0.22

Are Engineering Drawings Available?

Yes

Partners & Sponsors

- South Platte Natural Resources District (contract uploaded)

Instrumentation

Instrument 1 - Inflow

Name of Inflow Measurement Site

Huskerland West

Geographic Coordinates of Measurement Device

Latitude

41.015346

Longitude

-102.143596

Recorder Type

Staff Gage

Recording Increments

Daily

Live Data Feed available to NeDNR?

No

SPNRD #3

Location & Capacity

Name of Facility (If Only One Facility, This Is the Canal Name)

SPNRD #3

Type of Facility

Recharge Cell

Delivery Point Coordinates

Latitude

41.018402

Longitude

-102.136507

Operational Constraints: Enter Dates or Describe in the Narrative below When Can This Facility Can Be Operated?

Begin Date of Constraints (Optional):

End Date of Constraints (Optional):

Narrative of Constraints: Describe Details (Example: Weather Is Too Cold, so Cannot Operate the Facility)

pit cannot be operated when weather is too cold

Diversion Rate from Stream (CFS)

Amount needed to be diverted in order to deliver the amount specified in the next question below. The total of the diversion values entered for all project facilities should add up to the amount to be appropriated in the application section. 0.12

Delivery Rate (CFS)

Amount to Be delivered into the project facility from the stream diversion. If your project consists of one canal, then the value for this question should be the same as the value for the previous question. For projects where a canal delivers water to a recharge site: (the stream diversion rate) minus (the project facility delivery rate) = canal loss. 0.12

Anticipated Maximum Annual Diversion (AF)

The upper limit of water diverted from the stream for this project facility. 13.8

Maximum Operational Head (FT)

For reservoirs and wetlands, how deep will the water get? For canal sections, what is the maximum height of water (head) in the canal while diversions under this application are occurring? 8

Maximum Water Surface Area (Acres)

For reservoirs and wetlands, what will be the maximum water surface area corresponding to the maximum head. For canals this would be the average canal width multiplied by the canal section length where recharge will occur. 0.222

Are Engineering Drawings Available?

Yes

Partners & Sponsors

- South Platte Natural Resources District (contract uploaded)

Instrumentation

Instrument 1 - Inflow

Name of Inflow Measurement Site

Huskerland East

Geographic Coordinates of Measurement Device

Latitude 41.018402

Longitude -102.136507

Recorder Type

Staff Gage

Recording Increments

Daily

Live Data Feed available to NeDNR?

No

SPNRD #4

Location & Capacity

Name of Facility (If Only One Facility, This Is the Canal Name) *SPNRD #4*

Type of Facility *Recharge Cell*

Delivery Point Coordinates

Latitude *41.027906* Longitude *-102.137559*

Operational Constraints: Enter Dates or Describe in the Narrative below When Can This Facility Can Be Operated?

Begin Date of Constraints (Optional): End Date of Constraints (Optional):

Narrative of Constraints: Describe Details (Example: Weather Is Too Cold, so Cannot Operate the Facility) *pit cannot be operated when weather is too cold*

Diversion Rate from Stream (CFS)

Amount needed to be diverted in order to deliver the amount specified in the next question below. The total of the diversion values entered for all project facilities should add up to the amount to be appropriated in the application section. 0.3

Delivery Rate (CFS)

Amount to Be delivered into the project facility from the stream diversion. If your project consists of one canal, then the value for this question should be the same as the value for the previous question. For projects where a canal delivers water to a recharge site: (the stream diversion rate) minus (the project facility delivery rate) = canal loss. 0.3

Anticipated Maximum Annual Diversion (AF)

The upper limit of water diverted from the stream for this project facility. 36

Maximum Operational Head (FT)

For reservoirs and wetlands, how deep will the water get? For canal sections, what is the maximum height of water (head) in the canal while diversions under this application are occurring? 6

Maximum Water Surface Area (Acres)

For reservoirs and wetlands, what will be the maximum water surface area corresponding to the maximum head. For canals this would be the average canal width multiplied by the canal section length where recharge will occur. 1.376

Are Engineering Drawings Available? *Yes*

Partners & Sponsors

- South Platte Natural Resources District *(contract uploaded)*

Instrumentation

Instrument 1 - Inflow

Name of Inflow Measurement Site *Palser West*

Geographic Coordinates of Measurement Device

Latitude *41.027906* Longitude *-102.137559*

Recorder Type *Staff Gage*

Recording Increments *Daily*

Live Data Feed available to NeDNR? No

SPNRD #5

Location & Capacity

Name of Facility (If Only One Facility, This Is the Canal Name) SPNRD #5

Type of Facility Recharge Cell

Delivery Point Coordinates

Latitude 41.033142Longitude -102.109808

Operational Constraints: Enter Dates or Describe in the Narrative below When Can This Facility Can Be Operated?

Begin Date of Constraints (Optional):End Date of Constraints (Optional):

Narrative of Constraints: Describe Details (Example: Weather Is Too Cold, so Cannot Operate the Facility) pit cannot be operated when weather is too cold

Diversion Rate from Stream (CFS)

Amount needed to be diverted in order to deliver the amount specified in the next question below. The total of the diversion values entered for all project facilities should add up to the amount to be appropriated in the application section. 0.09

Delivery Rate (CFS)

Amount to Be delivered into the project facility from the stream diversion. If your project consists of one canal, then the value for this question should be the same as the value for the previous question. For projects where a canal delivers water to a recharge site: (the stream diversion rate) minus (the project facility delivery rate) = canal loss. 0.09

Anticipated Maximum Annual Diversion (AF)

The upper limit of water diverted from the stream for this project facility. 10.2

Maximum Operational Head (FT)

For reservoirs and wetlands, how deep will the water get? For canal sections, what is the maximum height of water (head) in the canal while diversions under this application are occurring? 10

Maximum Water Surface Area (Acres)

For reservoirs and wetlands, what will be the maximum water surface area corresponding to the maximum head. For canals this would be the average canal width multiplied by the canal section length where recharge will occur. 0.358

Are Engineering Drawings Available? Yes

Partners & Sponsors

- South Platte Natural Resources District (contract uploaded)

Instrumentation

Instrument 1 - Inflow

Name of Inflow Measurement Site Bogenhagen

SPNRD #6

Location & Capacity

Name of Facility (If Only One Facility, This Is the Canal Name) *SPNRD #6*

Type of Facility *Recharge Cell*

Delivery Point Coordinates

Latitude *41.021343* Longitude *-102.112954*

Operational Constraints: Enter Dates or Describe in the Narrative below When Can This Facility Can Be Operated?

Begin Date of Constraints (Optional): End Date of Constraints (Optional):

Narrative of Constraints: Describe Details (Example: Weather Is Too Cold, so Cannot Operate the Facility) *pit cannot be operated when weather is too cold*

Diversion Rate from Stream (CFS)

Amount needed to be diverted in order to deliver the amount specified in the next question below. The total of the diversion values entered for all project facilities should add up to the amount to be appropriated in the application section. *0.39*

Delivery Rate (CFS)

Amount to Be delivered into the project facility from the stream diversion. If your project consists of one canal, then the value for this question should be the same as the value for the previous question. For projects where a canal delivers water to a recharge site: (the stream diversion rate) minus (the project facility delivery rate) = canal loss. *0.39*

Anticipated Maximum Annual Diversion (AF)

The upper limit of water diverted from the stream for this project facility. *46*

Maximum Operational Head (FT)

For reservoirs and wetlands, how deep will the water get? For canal sections, what is the maximum height of water (head) in the canal while diversions under this application are occurring? *8*

Maximum Water Surface Area (Acres)

For reservoirs and wetlands, what will be the maximum water surface area corresponding to the maximum head. For canals this would be the average canal width multiplied by the canal section length where recharge will occur. *0.624*

Are Engineering Drawings Available? *Yes*

Partners & Sponsors

- South Platte Natural Resources District *(contract uploaded)*

Instrumentation

Instrument 1 - Inflow

Name of Inflow Measurement Site *Palser House*

Geographic Coordinates of Measurement Device

Latitude *41.021343* **Longitude** *-102.112954*

Recorder Type *Staff Gage*

Recording Increments *Daily*

Live Data Feed available to NeDNR? *No*

SPNRD #7

Location & Capacity

Name of Facility (If Only One Facility, This Is the Canal Name) *SPNRD #7*

Type of Facility *Recharge Cell*

Delivery Point Coordinates

Latitude *41.029411* **Longitude** *-102.100813*

Operational Constraints: Enter Dates or Describe in the Narrative below When Can This Facility Can Be Operated?

Begin Date of Constraints (Optional): **End Date of Constraints (Optional):**

Narrative of Constraints: Describe Details (Example: Weather Is Too Cold, so Cannot Operate the Facility) *pit cannot be operated when weather is too cold*

Diversion Rate from Stream (CFS)

Amount needed to be diverted in order to deliver the amount specified in the next question below. The total of the diversion values entered for all project facilities should add up to the amount to be appropriated in the application section. *2.48*

Delivery Rate (CFS)

Amount to Be delivered into the project facility from the stream diversion. If your project consists of one canal, then the value for this question should be the same as the value for the previous question. For projects where a canal delivers water to a recharge site: (the stream diversion rate) minus (the project facility delivery rate) = canal loss. *2.48*

Anticipated Maximum Annual Diversion (AF)

The upper limit of water diverted from the stream for this project facility. *294.6*

Maximum Operational Head (FT)

For reservoirs and wetlands, how deep will the water get? For canal sections, what is the maximum height of water (head) in the canal while diversions under this application are occurring? *16*

Maximum Water Surface Area (Acres)

For reservoirs and wetlands, what will be the maximum water surface area corresponding to the maximum head. For canals this would be the average canal width multiplied by the canal section length where recharge will occur. *1.593*

Are Engineering Drawings Available? *Yes*

Partners & Sponsors

- South Platte Natural Resources District (contract uploaded)

Instrumentation

Instrument 1 - Inflow

Name of Inflow Measurement Site Palser East

Geographic Coordinates of Measurement Device

Latitude 41.029411Longitude -102.100813

Recorder Type Staff Gage

Recording Increments Daily

Live Data Feed available to NeDNR? No

SPNRD #8

Location & Capacity

Name of Facility (If Only One Facility, This Is the Canal Name) SPNRD #8

Type of Facility Recharge Cell

Delivery Point Coordinates

Latitude 41.019682Longitude -102.105037

Operational Constraints: Enter Dates or Describe in the Narrative below When Can This Facility Can Be Operated?

Begin Date of Constraints (Optional):End Date of Constraints (Optional):

Narrative of Constraints: Describe Details (Example: Weather Is Too Cold, so Cannot Operate the Facility) pit cannot be operated when weather is too cold

Diversion Rate from Stream (CFS)

Amount needed to be diverted in order to deliver the amount specified in the next question below. The total of the diversion values entered for all project facilities should add up to the amount to be appropriated in the application section. 0.21

Delivery Rate (CFS)

Amount to Be delivered into the project facility from the stream diversion. If your project consists of one canal, then the value for this question should be the same as the value for the previous question. For projects where a canal delivers water to a recharge site: (the stream diversion rate) minus (the project facility delivery rate) = canal loss. 0.21

Anticipated Maximum Annual Diversion (AF)

The upper limit of water diverted from the stream for this project facility. 24.6

Maximum Operational Head (FT)

For reservoirs and wetlands, how deep will the water get? For canal sections, what is the maximum height of water (head) in the canal while diversions under this application are occurring? 10

Maximum Water Surface Area (Acres)

For reservoirs and wetlands, what will be the maximum water surface area corresponding to the maximum head. For canals this would be the average canal width multiplied by the canal section length where recharge will occur. 0

Are Engineering Drawings Available?

Yes

Partners & Sponsors

- South Platte Natural Resources District *(contract uploaded)*

Instrumentation

Instrument 1 - Inflow

Name of Inflow Measurement Site

Palser Bins

Geographic Coordinates of Measurement Device

Latitude

41.019682

Longitude

-102.105037

Recorder Type

Staff Gage

Recording Increments

Daily

Live Data Feed available to NeDNR?

No

SPNRD #9

Location & Capacity

Name of Facility (If Only One Facility, This Is the Canal Name)

SPNRD #9

Type of Facility

Recharge Cell

Delivery Point Coordinates

Latitude

41.025808

Longitude

-102.095092

Operational Constraints: Enter Dates or Describe in the Narrative below When Can This Facility Can Be Operated?

Begin Date of Constraints (Optional):

End Date of Constraints (Optional):

Narrative of Constraints: Describe Details (Example: Weather Is Too Cold, so Cannot Operate the Facility)

pit cannot be operated when weather is too cold

Diversion Rate from Stream (CFS)

Amount needed to be diverted in order to deliver the amount specified in the next question below. The total of the diversion values entered for all project facilities should add up to the amount to be appropriated in the application section. 0.63

Delivery Rate (CFS)

Amount to Be delivered into the project facility from the stream diversion. If your project consists of one canal, then the value for this question should be the same as the value for the previous question. For projects where a canal delivers water to a recharge site: (the stream diversion rate) minus (the project facility delivery rate) = canal loss. 0.63

Anticipated Maximum Annual Diversion (AF)

The upper limit of water diverted from the stream for this project facility. 74

Maximum Operational Head (FT)

For reservoirs and wetlands, how deep will the water get? For canal sections, what is the maximum height of water (head) in the canal while diversions under this application are occurring? 6

Maximum Water Surface Area (Acres)

For reservoirs and wetlands, what will be the maximum water surface area corresponding to the maximum head. For canals this would be the average canal width multiplied by the canal section length where recharge will occur. 2.53

Are Engineering Drawings Available?

Yes

Partners & Sponsors

- South Platte Natural Resources District (contract uploaded)

Instrumentation

Instrument 1 - Inflow

Name of Inflow Measurement Site

Hendrickson North

Geographic Coordinates of Measurement Device

Latitude

41.025808

Longitude

-102.095092

Recorder Type

Staff Gage

Recording Increments

Daily

Live Data Feed available to NeDNR?

No

SPNRD #10

Location & Capacity

Name of Facility (If Only One Facility, This Is the Canal Name)

SPNRD #10

Type of Facility

Recharge Cell

Delivery Point Coordinates

Latitude

41.025613

Longitude

-102.096261

Operational Constraints: Enter Dates or Describe in the Narrative below When Can This Facility Can Be Operated?

Begin Date of Constraints (Optional):

End Date of Constraints (Optional):

Narrative of Constraints: Describe Details (Example: Weather Is Too Cold, so Cannot Operate the Facility)

pit cannot be operated when weather is too cold

Diversion Rate from Stream (CFS)

Amount needed to be diverted in order to deliver the amount specified in the next question below. The total of the diversion values entered for all project facilities should add up to the amount to be appropriated in the application section. 0.42

Delivery Rate (CFS)

Amount to Be delivered into the project facility from the stream diversion. If your project consists of one canal, then the value for this question should be the same as the value for the previous question. For projects where a canal delivers water to a recharge site: (the stream diversion rate) minus (the project facility delivery rate) = canal loss. 0.42

Anticipated Maximum Annual Diversion (AF)

The upper limit of water diverted from the stream for this project facility. 49

Maximum Operational Head (FT)

For reservoirs and wetlands, how deep will the water get? For canal sections, what is the maximum height of water (head) in the canal while diversions under this application are occurring? 11

Maximum Water Surface Area (Acres)

For reservoirs and wetlands, what will be the maximum water surface area corresponding to the maximum head. For canals this would be the average canal width multiplied by the canal section length where recharge will occur. 0.401

Are Engineering Drawings Available?

Yes

Partners & Sponsors

- South Platte Natural Resources District (contract uploaded)

Instrumentation

Instrument 1 - Inflow

Name of Inflow Measurement Site

Hendrickson South

Geographic Coordinates of Measurement Device

Latitude

41.025613

Longitude

-102.096261

Recorder Type

Staff Gage

Recording Increments

Daily

Live Data Feed available to NeDNR?

No

SPNRD #11

Location & Capacity

Name of Facility (If Only One Facility, This Is the Canal Name) *SPNRD #11*

Type of Facility *Recharge Cell*

Delivery Point Coordinates

Latitude *41.027061*Longitude *-102.079684*

Operational Constraints: Enter Dates or Describe in the Narrative below When Can This Facility Can Be Operated?

Begin Date of Constraints (Optional):End Date of Constraints (Optional):

Narrative of Constraints: Describe Details (Example: Weather Is Too Cold, so Cannot Operate the Facility) *pit cannot be operated when weather is too cold*

Diversion Rate from Stream (CFS)

Amount needed to be diverted in order to deliver the amount specified in the next question below. The total of the diversion values entered for all project facilities should add up to the amount to be appropriated in the application section. 0.1

Delivery Rate (CFS)

Amount to Be delivered into the project facility from the stream diversion. If your project consists of one canal, then the value for this question should be the same as the value for the previous question. For projects where a canal delivers water to a recharge site: (the stream diversion rate) minus (the project facility delivery rate) = canal loss. 0.1

Anticipated Maximum Annual Diversion (AF)

The upper limit of water diverted from the stream for this project facility. 12

Maximum Operational Head (FT)

For reservoirs and wetlands, how deep will the water get? For canal sections, what is the maximum height of water (head) in the canal while diversions under this application are occurring? 10

Maximum Water Surface Area (Acres)

For reservoirs and wetlands, what will be the maximum water surface area corresponding to the maximum head. For canals this would be the average canal width multiplied by the canal section length where recharge will occur. 0.316

Are Engineering Drawings Available? *Yes*

Partners & Sponsors

- South Platte Natural Resources District *(contract uploaded)*

Instrumentation

Instrument 1 - Inflow

Name of Inflow Measurement Site *Bauman*

Geographic Coordinates of Measurement Device

Latitude *41.027061*Longitude *-102.079684*

Recorder Type *Staff Gage*

Recording Increments *Daily*

Live Data Feed available to NeDNR? No

SPNRD #12

Location & Capacity

Name of Facility (If Only One Facility, This Is the Canal Name) SPNRD #12

Type of Facility Recharge Cell

Delivery Point Coordinates

Latitude 41.032621Longitude -102.06131

Operational Constraints: Enter Dates or Describe in the Narrative below When Can This Facility Can Be Operated?

Begin Date of Constraints (Optional):End Date of Constraints (Optional):

Narrative of Constraints: Describe Details (Example: Weather Is Too Cold, so Cannot Operate the Facility) pit cannot be operated when weather is too cold

Diversion Rate from Stream (CFS)

Amount needed to be diverted in order to deliver the amount specified in the next question below. The total of the diversion values entered for all project facilities should add up to the amount to be appropriated in the application section. 0.15

Delivery Rate (CFS)

Amount to Be delivered into the project facility from the stream diversion. If your project consists of one canal, then the value for this question should be the same as the value for the previous question. For projects where a canal delivers water to a recharge site: (the stream diversion rate) minus (the project facility delivery rate) = canal loss. 0.15

Anticipated Maximum Annual Diversion (AF)

The upper limit of water diverted from the stream for this project facility. 17.4

Maximum Operational Head (FT)

For reservoirs and wetlands, how deep will the water get? For canal sections, what is the maximum height of water (head) in the canal while diversions under this application are occurring? 14

Maximum Water Surface Area (Acres)

For reservoirs and wetlands, what will be the maximum water surface area corresponding to the maximum head. For canals this would be the average canal width multiplied by the canal section length where recharge will occur. 0.428

Are Engineering Drawings Available? Yes

Partners & Sponsors

- South Platte Natural Resources District (contract uploaded)

Instrumentation

Instrument 1 - Inflow

Name of Inflow Measurement Site Skogland North

SPNRD #13

Location & Capacity

Name of Facility (If Only One Facility, This Is the Canal Name) *SPNRD #13*

Type of Facility *Recharge Cell*

Delivery Point Coordinates

Latitude *41.02826* Longitude *-102.055011*

Operational Constraints: Enter Dates or Describe in the Narrative below When Can This Facility Can Be Operated?

Begin Date of Constraints (Optional): End Date of Constraints (Optional):

Narrative of Constraints: Describe Details (Example: Weather Is Too Cold, so Cannot Operate the Facility) *pit cannot be operated when weather is too cold*

Diversion Rate from Stream (CFS)

Amount needed to be diverted in order to deliver the amount specified in the next question below. The total of the diversion values entered for all project facilities should add up to the amount to be appropriated in the application section. *0.12*

Delivery Rate (CFS)

Amount to Be delivered into the project facility from the stream diversion. If your project consists of one canal, then the value for this question should be the same as the value for the previous question. For projects where a canal delivers water to a recharge site: (the stream diversion rate) minus (the project facility delivery rate) = canal loss. *0.12*

Anticipated Maximum Annual Diversion (AF)

The upper limit of water diverted from the stream for this project facility. *13.8*

Maximum Operational Head (FT)

For reservoirs and wetlands, how deep will the water get? For canal sections, what is the maximum height of water (head) in the canal while diversions under this application are occurring? *12*

Maximum Water Surface Area (Acres)

For reservoirs and wetlands, what will be the maximum water surface area corresponding to the maximum head. For canals this would be the average canal width multiplied by the canal section length where recharge will occur. *0.682*

Are Engineering Drawings Available? *Yes*

Partners & Sponsors

- South Platte Natural Resources District *(contract uploaded)*

Instrumentation

Instrument 1 - Inflow

Name of Inflow Measurement Site *Skogland South*

Geographic Coordinates of Measurement Device

Latitude *41.02826* **Longitude** *-102.055011*

Recorder Type *Staff Gage*

Recording Increments *Daily*

Live Data Feed available to NeDNR? *No*

Partners & Sponsors


Sponsor 1

Name of Entity Paying for Recharge at this Facility *Twin Platte Natural Resources District*

Per Acre-foot Cost Basis for Recharge at This Facility *Recharged*

Max Volume per Annum *21000*

Upload Sponsor Documents

 [5 year MOA Westerm \(2018-2022\) Excess Flow Contract #1010 - Signed.pdf \[https://dssdnr.nebraska.gov/filedownload/119\]](https://dssdnr.nebraska.gov/filedownload/119)


Sponsor 2

Name of Entity Paying for Recharge at this Facility *South Platte Natural Resources District*

Per Acre-foot Cost Basis for Recharge at This Facility *Recharged*

Max Volume per Annum *8500*

Upload Sponsor Documents

 [5 year MOA Westerm \(2018-2022\) Excess Flow Contract #1010 - Signed.pdf \[https://dssdnr.nebraska.gov/filedownload/120\]](https://dssdnr.nebraska.gov/filedownload/120)