



VARIANCE REQUEST FOR NEW WATER WELL IN A STAY MANAGEMENT AREA OF THE LOWER PLATTE NORTH NRD (LPNNRD)

Updated Form: June 2022

NRD USE ONLY

Date Received _____ Paid: Cash or Check _____

Initial Review by NRD Representative _____

Certified Acres _____ by NRD Representative _____

Date of Water Committee Recommendation to the NRD Board _____

Date NRD Board issues Conditional Approval or Denial of Variance Request _____

Date of Approved Variance _____ by NRD Representative _____

ALL APPLICANTS SEEKING A WATER WELL VARIANCE MUST COMPLETE PAGES 1 AND 2, AND THE APPROPRIATE SECTION BASED ON THE PURPOSE OF THE WELL. (CLASS 1-4 VARIANCE)

VARIANCE REQUESTS FOR IRRIGATED ACRES GREATER THAN 160 ACRES IN SIZE OR TOTAL ANNUAL WATER USE BETWEEN 150 AND 300 ACRE FEET PER YEAR MUST COMPLETE PAGES 1, 2, AND 3, AND THE APPROPRIATE SECTION BASED ON THE PURPOSE OF THE WELL. (CLASS 3 VARIANCE)

VARIANCE REQUESTS FOR TOTAL ANNUAL WATER USE EQUAL TO OR GREATER THAN 300 ACRE FEET PER YEAR, REGARDLESS OF NUMBER OF IRRIGATION ACRES, MUST COMPLETE PAGES 1, 2, AND 4, AND THE APPROPRIATE SECTION BASED ON THE PURPOSE OF THE WELL. (CLASS 4 VARIANCE)

1. NAME AND ADDRESS OF APPLICANT:

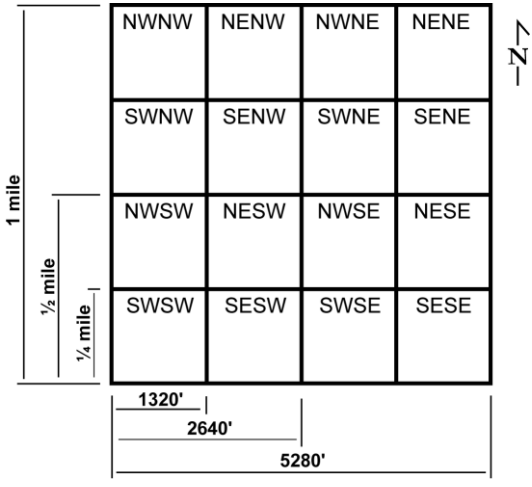
Home Phone: () - _____ - _____
 Cell Phone: () - _____ - _____
 Landowner Name: _____
(if other than applicant)

2. PURPOSE OF NEW WATER WELL (indicate one or more):

- Irrigation (Complete section A)
- Livestock (Complete section C)
- Industrial (Complete section E)
- Recovery or Remediation (Complete section G)
- Other (specify) _____ (Complete section H)
- Dewatering (Over 30 days, Complete section B)
- Domestic (Irr. on one acre or larger, Complete section D)
- Public Water Supply (Complete section F)

3. LOCATION OF PROPOSED NEW WATER WELL:

- A. _____ County, _____ ¼ of the _____ ¼ of Section _____, Township _____ North, Range _____ East/West. (circle one)
- B. The box at the right represents one square mile, (section). Indicate with an "X", the proposed location of the well. Outline the proposed water use area. If the water is to be used outside the above written legal description, give legal description of water use area, _____ ¼ of the _____ ¼ of Section _____, Township _____ North, Range _____ East/West.
- C. The well will be located _____ feet from the North/South section line, and will be _____ feet from the East/West section line. Or enter Lat. / Long.
 Latitude Degree _____ Minute _____ Second _____
 Longitude Degree _____ Minute _____ Second _____



4. GROUND WATER SOURCE:

- A. Expected total well depth: _____ feet.
- B. Estimated pumping capacity: _____ GPM.
- C. Expected total annual water use in Acre Inches / Year _____ or Total Gallons / Year _____
- D. Will the well be used in a system with other wells? Yes, No. If Yes, How many _____
Attach list of well registration number and legal description for each well.

5. REUSE WATER (If any reuse water will be used, fill out this section):

- A. Legal Description of water source: _____ County, _____ ¼ of the _____ ¼ of Section _____, Township _____ North, Range _____ East/West. (circle one)
- B. Landowner and Address of person(s) providing reuse water _____
- C. Original water source of this reuse water: Ground Water, Surface Water, mark all that apply
- D. Total annual amount of consumptive water use to be delivered to proposed location in
Acre Inches / Year _____ or Total Gallons / Year _____
 - Attach information from the operation you will be using as a source of reuse water. List amount of intake water used by this operation, description of water use within the operation, and the amount discharged.
 - Irrigation water by itself can not be credited as reuse water for another user.

6. OFFSET WATER USE:

- A. Will proposed new water well be offset by retiring water use in this same aquifer system? Yes, No
- B. If Yes, give legal description of that offsetting water use: _____ County, _____ ¼ of the _____ ¼ of Section _____, Township _____ North, Range _____ East/West. (circle one)
- C. Landowner and Address of person(s) providing offset _____
- D. If using offset from irrigation, list number of acres at this 'offset' location _____
- E. Original water source of this offset water: Ground Water, Surface Water, Reuse Water, mark all that apply.
- F. Total annual amount of consumptive water use to be retired at this 'offset' location in
Acre Inches / Year _____ or Total Gallons / Year _____
 - Please provide flow records for the last five years from this 'offset' location.

7. Addition information and requirements for Lower Platte North NRD review.

- Attach current tax assessor records including map, parcel number, and current land use such as irrigated acres.
- Attach aerial photo showing location of water source(s) and area water or reuse water is to be used.
- All new and replacement water wells must install a District approved flow meter and report water pumped annually to the LPNNRD by January 31st of the following year. See approved list in this packet.
- Additional variance conditions maybe required for approval by the Lower Platte North NRD.
- Variances will be reviewed annually.

8. I certify that I am familiar with the information contained in this application, and it's restrictions, rules and regulations and that to the best of my knowledge and belief such information is true, complete and accurate.

Date _____ Signature of Applicant _____
Signature of Well System Operator, if different than Applicant _____
NRD Certification Number of Landowner or Operator _____ (Required for irrigation, livestock, domestic (with irrigation on one acre or more of land), industrial, and public water supply wells.)

9.

If needed, Signature of Landowner supplying Reuse Water _____
Date _____
(On the District's Expanded Water Use Variance Form, fill out section 4 (Water Source) – C (Reuse Water) and submit the information with this variance form.)

If needed, Signature of Landowner providing Offset Water _____
Date _____



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Updated Form: May 2008

VARIANCE REQUEST FOR IRRGATED ACRES GREATER THAN 160 ACRES IN SIZE OR TOTAL ANNUAL WATER USE BETWEEN 150 AND 300 ACRE FEET PER YEAR, PROVIDE INFORMATION REQUESTED ON PAGES 1, 2, AND 3. (CLASS 3 VARIANCE)

10. WATER SOURCE INFORMATION:

In a TWO-mile radius around the water source location, provide the following information to the LPNNRD in both paper copy and electronically in Excel Spreadsheet (Microsoft) or Access Database (Microsoft) format.

- A. List of all registered wells in this area giving registration number, well identification number, legal description, latitude / longitude or UTM coordinates in NAD 83, elevation in feet above mean sea level, and well log for each well.
 - B. List of all test holes in the area that have been published by Conservation and Survey Division of the University of Nebraska.
 - C. List of all surface water rights in this area giving appropriation number, priority date, legal description, use, status, current total acres (if applicable), and grant amount.
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11. WATER USE LOCATION INFORMATION:

In the location where the water will be used, provide the following information to the LPNNRD in both paper copy and electronically in Word (Microsoft) format.

- A. Description of expanded water use including: latitude / longitude or UTM coordinates in NAD 83 of water use location and timeframe or schedule when water will be used.
 - B. Amount of water that can be reused or recycled at this new location.
 - C. Description of how water will be used at this new location, i.e. process water vs. cooling water, etc.
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Updated Form: May 2008

VARIANCE REQUEST FOR TOTAL ANNUAL WATER USE EQUAL TO OR GREATER THAN 300 ACRE FEET PER YEAR, REGARDLESS OF NUMBER OF IRRIGATED ACRES, PROVIDE INFORMATION REQUESTED ON PAGES 1, 2, AND 4. (CLASS 4 VARIANCE)

12. WATER SOURCE INFORMATION:

In a FIVE-mile radius around the water source location, provide the following information to the LPNNRD in both paper copy and electronically in Excel Spreadsheet (Microsoft) or Access Database (Microsoft) format.

- A. List of all registered wells in this area giving registration number, well identification number, legal description, elevation in feet above mean sea level, latitude / longitude or UTM coordinates in NAD 83, and well log for each well.
 - B. List of all test holes in the area that have been published by Conservation and Survey Division of the University of Nebraska.
 - C. List of all surface water rights in this area giving appropriation number, priority date, legal description, use, status, current total acres (if applicable), and grant amount.
-

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- A. Description of expanded water use including: latitude / longitude or UTM coordinates in NAD 83 of water use location and timeframe or schedule when water will be used.
 - B. Amount of water that can be reused or recycled at this new location.
 - C. Description of how water will be used at this new location, i.e. process water vs. cooling water, etc.
-

14. AQUIFER PUMP TEST:

In the location of the proposed water source an aquifer pump test is to be performed to obtain geologic data that will be used in the ensuing ground water modeling effort. Data from the pump test is to be reported to the LPNNRD in both paper copy and electronically in Excel Spreadsheet (Microsoft) or Access Database (Microsoft) format.

- A. Description of pumping well should include legal description of well, latitude / longitude or UTM coordinates in NAD 83, elevation of well in feet above mean sea level, total amount of water pumped, gallons per minute during pump test, duration of pump test, well construction, well log, water discharge location and method.
 - B. Description of each monitoring well should include legal description of well, latitude / longitude or UTM coordinates in NAD 83, spacing in feet and direction from pumping well, elevation of well in feet above mean sea level, well log, and well construction.
 - C. Depth to bedrock, bedrock material, and name of geologic formation.
-

15. GROUNDWATER MODEL:

In a FIVE-mile radius of the location of the proposed water source a ground water model using MODFLOW software, or similar software approved by LPNNRD, is to be done. Data from the ground water model is to be reported to the LPNNRD in both paper copy and electronically using the appropriate software.

- A. Model should list boundary conditions used, grid size, include all high capacity wells in modeled area, streams and rivers in the modeled area, expected recharge rates, location and flow amounts, hydrologic conductivity and transmissivity values used.
 - B. At least one iteration, reviewed and approved by LPNNRD, should model steady state conditions over a five-year period with a no flow boundary, and little or no recharge to simulate drought conditions.
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Updated Form: May 2008

PURPOSE OF WELL

IRRIGATION WELLS (SECTION A)

- A. How many acres will be irrigated? _____ acres
- B. Crops to be planted: _____ Crop rotation schedule _____
- C. Type of irrigation system. Center Pivot, Gravity, Other (specify) _____
- D. The irrigation system is to be powered by Electric Fuel
- E. Expected total annual consumptive water use in Acre Inches / Year _____ or
Total Gallons / Year _____
- F. Will Fertilizer, Chemicals or Animal waste be applied through the system? Yes, No

DEWATERING WELLS OVER 30 DAYS (SECTION B)

- A. Purpose of dewatering well, such as installation of building foundation, etc. _____
- B. Expected total number of days the dewatering well will be in use _____
- C. Approximate dates (month/day/year) in operation: Start _____ End _____
- D. Legal description of water discharge location: _____ ¼ of the _____ ¼ of Section _____, Township _____ North,
Range _____ East/West and name of river, stream or water body _____
- E. Will discharge water be used for another purpose, such as livestock, irrigation, etc.? Yes, No
If Yes, list purpose, location and expected total amount of water use in acre-inches / year or total gallons / year.

LIVESTOCK WELLS (SECTION C)

- A. Name of facility _____
- B. Type of Livestock: Feeder Cattle, Dairy Cattle, Swine over 55 lbs., Swine under 55 lbs.,
 Sheep, Poultry, Horses
- C. Average number of livestock per year _____ and average weight per animal _____ lbs.
- D. Peak number of livestock _____ and time of year _____
- E. Is facility approved by Nebraska Department of Environmental Quality? Yes, No. If Yes, list NDEQ
certification IIS number _____ If No, complete the rest of this section.
- F. Type of facility: Open lot, Covered Building
- G. If facility is Open lot, list soil type _____
- H. Estimated depth to ground water under feedlot _____ ft.
- I. Describe manure collection system of feedlot _____
- J. Name and distance of nearest surface watercourse from feedlot _____
- K. For each manure land application site, list legal description and size in acres, method of application, and distance
from feedlot operation. _____

DOMESTIC WELLS WITH IRRIGATION ON ONE ACRE OR MORE (SECTION D)

- A. Check all that apply:
 - a. Water use: Lawn and number of acres to be irrigated _____ acres.
 - b. Water use: Commercial garden and number of acres to be irrigated _____ acres.
 - c. Water use: Tree Farm and number of acres to be irrigated _____ acres.
 - d. Water use: Type of livestock _____ and number _____
- B. Type of irrigation system. Sprinkler, Drip Tape, Other (specify) _____
- C. If applicable, give Street address and town _____

* One acre equals 43,560 square feet.

INDUSTRIAL AND COMMERCIAL WELLS (SECTION E)

- A. Name of facility _____
- B. Products produced by facility _____
- C. In Section 6 or on a separate sheet of paper, list well registration number and legal description of current wells supplying water to this facility.
- D. In Section 6 or on a separate sheet of paper, provide a short description how water is used within the facility and the expected annual amount of water for each use. For example: "The manufacturing plant will use 45% of total annual water use, or 1.45 million gallons per year, for electroplating of galvanized pipe and the remaining 55% of total annual water use, or 1.77 million gallons per year, will be used for non-contact cooling water throughout the plant".
- E. Will any of the used water or waste water from this facility be re-used for another purpose? Yes, No.
If Yes, list purpose, location and expected total amount of water use in acre-inches / year or total gallons / year.

PUBLIC WATER SUPPLY WELLS (SECTION F)

- A. On a separate sheet of paper, list the well registration numbers and legal description of current wells supplying water to this community.
- B. Attach a list of the five largest industrial water users that your community supplies water to, and the total annual amount of water supplied to each of these industries for the last five years.
- C. For these same industries list the total annual amount of water returned to the community as waste water for each of the last five years.
- D. Will waste water be used for another purpose, such as livestock, irrigation, etc.? Yes, No
If Yes, list purpose, location and expected total amount of water use in acre-inches / year or total gallons / year.

- E. Attach a list of the golf courses that the community supplies water to and list the location and number of acres for each one.

RECOVERY OR REMEDIATION WELLS (SECTION G)

- A. Reason for recovery or remediation well, i.e. leaking underground storage tank. _____

- B. Contaminates of concern _____
- C. Treatment method of contaminants _____
- D. Approximate dates (month/day/year) in operation: Start _____ End _____
- E. Legal description of water discharge location: ____ ¼ of the ____ ¼ of Section ____, Township ____ North, Range ____ East/West and name of river, stream or water body _____
- F. Will cleanup water be used for another purpose, such as livestock, irrigation, etc.? Yes, No
If Yes, list purpose, location and expected total amount of water use in acre-inches / year or total gallons / year.

OTHER WELLS (SECTION H)

- A. Purpose of water use _____
 - B. Will the well be used for one calendar year or less? Yes, No
 - a. If Yes, list approximate dates (month/day/year) the well will be in operation: Start _____
End _____
 - b. If No, list the approximate dates (months) or seasons of the calendar year that well is expected to be in peak or highest use. _____
 - C. Legal description of water discharge location: ____ ¼ of the ____ ¼ of Section ____, Township ____ North, Range ____ East/West and name of river, stream or water body _____
-

All applicants must complete pages 1 and 2 in full. Depending upon size of irrigated field or total annual water use, information listed on pages 3 or 4 may also be required. A \$75.00 filing fee is required for each application for a Variance (payable to the Lower Platte North Natural Resources District). In addition, for Class 3 variances an added fee of \$250.00 is required for District review. For Class 4 variances an added fee of \$500.00 is required for District review. Forward this application and filing fee to:

**Lower Platte North Natural Resources District
P.O. Box 126
Wahoo, NE 68066
Phone: (402) 443-4675**

Filing fee may be refunded if all water sources (including cones of depression if the water source is from ground water) and all areas of expanded water use are beyond the District's official boundary defined as Stay Management areas.

Please take the time to fill out the information correctly. The District will return an incomplete or defective application, with 60 days being allowed for resubmission. The District shall grant or deny all variances, or report that a variance is not needed, no later than 60 days following recommendation from the LPNNRD Water Committee to the Board.

VARIANCE RESTRICTIONS

1. Variances are required, on or after May 14, 2007, in the Stay management areas of the Lower Platte North NRD prior to any expansion in water use or to the application for a new water well permit.
2. An Expanded Water Use Variance or New Water Well Variance is not required for test holes, temporary dewatering wells (30 days or less), or water wells designed to pump 50 gallons per minute or less, unless water is commingled, combined, clustered or joined with any other water well or wells, which would result in total water capacity to be over 50 gallons per minute. New low capacity wells designed to pump 50 gallons per minute or less will also require a variance request in Stay Management areas, but not in the Hydrologically Connected Stay Management area. This requirement on low capacity wells does not apply to domestic wells irrigating less than one acre of land or wells for range livestock. If you have questions, please call the LPNNRD at 402-443-4675.
3. A New Water Well Variance approved by the District only applies to the locations specified and/or the volume of water used, as listed in this application. Any proposed additional water wells for expansion of water use in size of area or in volume of water applied will require application for another New Water Well Variance.
4. If expansion of water use could result in existing wells to enlarge their cones of influence (cones of depression) to now overlap into the District's defined Stay management areas, an Expanded Water Use Variance will now be required.
5. Consumptive water use in acre-inches is determined from the Department of Natural Resources (DNR) Net Corn Crop Irrigation Requirement map or a similar map produced by the University of Nebraska.
6. If a new water well is the only water source for any expanded water use, then use this form instead of the District's 'Expanded Water Use Variance' form.
7. If a new water well and another water source, such as surface water or reuse water, will be used then the applicant will need to fill out both a variance request for a new water well and expanded water use, but the fee shall remain at \$75.00.
8. Variance requests from a single landowner, landowners or entities that seek to supply water to a single facility or operation will be required to fill out that portion of the variance form that considers the collective total annual amount of water use, both existing and proposed, that will be used by that facility or operation.
9. Tax assessor records submitted with the variance request must include map, parcel number and an accurate account of current land use, such as irrigated acres.
10. Aerial photograph with markings to show the location of the water source(s) and the location of where the water is to be used, shall be submitted with the variance request form.
11. If reuse water is one of the water sources, the applicant must fill out section 4 (Water Sources) – C (Reuse Water) of the District's Expanded Water Use Variance form and supply information listing the annual amount of intake water, description of water use within the operation and the annual amount of water discharged from this operation and submit this information with this variance request.
12. Reuse water from the same aquifer sub-area can be used as a credit, such as a municipality or industry, but only if that source does not increase its own water withdrawal to compensate for this reuse. Irrigation water by itself can not be credited as reuse water for another user.
13. Any person, who knowingly furnishes false information regarding a New Water Well Variance, shall be subject to the imposition of penalties imposed through the controls adopted by the District pursuant to §46-746.

14. A Variance request will require that the applicant or operator of irrigation, livestock, domestic (with irrigation on one acre or more of land), industrial, and public water supply wells by NRD certified.
15. LPNNRD review of any variance request will be based, in part, on a point system evaluation. See “Instructions to Fill Out Variance Request Form --” for details.
16. Review of the variance request by the District will also be based on discretionary factors, including but not limited to, whether the variance request would promote the health and welfare of the District by contributing to the conservation, protection, development, and sound management of natural resources in the District.
17. Landowner has 90 days following ‘conditional approval’ to apply to the NRD for a water well permit, and comply with any additional conditions required by the NRD. Conditional approval will expire in 90 days from date of issuance by the LPNNRD Board.
18. When the conditions of the variance have been satisfied and approved by the NRD within 90 days of issuance, then the ‘conditionally approved variance’ shall become an ‘approved variance’. If these conditions have not been met, the landowner will need to submit a new variance request.
19. Construction of a new water well without an ‘approved variance’ and an approved NRD Water Well Permit, shall result in the District issuing a ‘cease and desist order’ against further construction and use of that water well.
20. Landowner has 90 days after completion of the well to update County Assessor records, submit well registration to DNR and comply with any additional conditions required by the District.
21. If ground water is not initially put to use within a one-year period following construction and completion of the water well as approved by LPNNRD and DNR, then a New Water Well Variance is needed. The LPNNRD may grant an exception for good cause shown, such as abundant rainfall received on new or expanded irrigated acres when actual irrigation would not be necessary. Please contact the LPNNRD if you think an exception may apply.
22. If a New Water Well Variance and NRD Water Well Permit are granted, then water users must report water pumped annually in acre-inches per year or total gallons per year on LPNNRD approved forms by January 31st of each following year.
23. If multiple water sources are used, landowner must supply flow records from each water source in acre-inches per year or total gallons per year on LPNNRD approved forms by January 31st of each following year.
24. After construction of the water well is complete, the well driller is required to register the well with the Department of Natural Resources.
25. The District may void an approved variance at any time if the Board finds good cause to do so.
26. The approved variance will also be subject to annual renewal by the District. If the District believes the variance should not be renewed, the District will inform the landowner with at least a 45 day notice stating the intentions of the District and allowing the landowner to request a hearing before the Board of Directors within that time limit.

**** Landowners must apply for a water well permit to LPNNRD, and comply with any additional conditions within 90 days of LPNNRD conditional approval of this Variance. Landowner will need NRD approval for a new Water Well Variance AND Water Well Permit, before the well can be constructed. Following completion of the well, landowners have 90 days to list new irrigated acres with the County Assessor, submit well registration information to the Department of Natural Resources and comply with any additional conditions required by the LPNNRD. LPNNRD staff may perform a site visit to verify information provided in the variance request. ****

COMMENTS/RESTRICTIONS: Variance conditions required for approval by LPNNRD.

This variance is approved as a class 2 variance for 130.00 new irrigated acres (130.00 total irrigated acres) from this well with the following conditions:

General Conditions Applied To All New Well Variance Applications

- 1. A well permit must be filed with the Lower Platte North NRD within 90 days of conditionally approved variance.**
- 2. A Lower Platte North NRD approved flow meter needs to be installed on the wells following manufacturer’s recommendations.**
- 3. Total annual water use pumped by the well will be reported to the Lower Platte North NRD on District approved forms by January 31st of each following year.**
- 4. Landowner must have the correct number of irrigated acres listed with both the County Assessor and the Nebraska Department of Natural Resources.**

**Approved List of Propeller Flow Meters
Lower Platte North Natural Resources District (LPNNRD)
Effective: April 11, 2022**



Approved List of Propeller Flow Meters and Required Conditions

LPNNRD requirements for all propeller flow meters:

- Anti-reverse flow feature to prevent backflow.
- Follow manufactures installation recommendations taking into account in-pipe jetting or non-jetting flow conditions. (Correct installation of the flow meter is critical to getting an accurate reading. Most meters require a straight pipe before and after the flow meter that is at least equivalent to five times the pipe diameter in order to obtain an accurate flow measurement. Doing the installation correctly the first time saves money in the long run).
- Straightening vanes are required according to manufacturer’s installation recommendations for in-pipe jetting or non-jetting flow conditions.
- Meter must be positioned to ensure water totally fills the pipe, such as a level pipe or positioned on a riser.
- Meter must be configured: to inside and outside diameter of the pipe, material of the pipe, meter used that will operate within minimum and maximum output flow rates of the well, horizontal or vertical installations, and unobstructed straight run distance upstream and downstream of meter and in most cases straightening vanes (or other flow straightener) will be necessary.
- Meter totalizes flow in acre inches and flow meter dial is in gallons per minute.
- A flow meter must be dedicated to each individual well. (Exceptions will be made if several wells are used to provide enough water to operate a single irrigation system such as a pivot or gated pipe. In these situations a flow meter placed at the central location where all water can be metered is acceptable).

Manufacturer	Model	Notes
McCrometer	McPropeller	All propeller models
Sparling	Propeller saddle meter	Model 312 propeller meter
Geyser	Saddle meter	All propeller models for Farmland Irrigation

LPNNRD prefers the following added features for all propeller flow meters:

- Over-run bearing (or extra bearing) for smother operation and to extend life of the meter
- Canopy cover to protect meter

LPNNRD will inspect systems for proper installation of flow meters