

Inland Surface Water Plan

Information needs from water and drainage districts or other entities (1992)

I. General

1. District or entity name and mailing address
2. Manager or Contact Person
3. Total area in the district or drainage area (acres)
4. Map showing boundaries of the district or drainage basin (USGS Quad or other map)
5. Source(s) of water for the district or drainage basin

II. Water Supply Sources

1. Map showing the key components of the surface water supply system. The map should include:
 - a. Location of surface water supply (intake) points for the district or drainage basin
 - b. Location of ground water supply points for the district or drainage basin (This should only include wells which pump directly into canals or drains or wells used to supply water outside the land owners' control)
 - c. Location of operation spills from the district or drainage basin
 - d. Location of all supply canals and designations as to whether they are natural channels being used to transport supply water or whether they are canals constructed for the purpose of supplying irrigation water
2. Estimates of average total annual inflow volume and the monthly distribution of this annual inflow for both surface water and ground water
3. Table listing the name of all supply canals as well as:
 - a. Whether the canal is a natural channel or a constructed facility and, if constructed, the type of construction (e.g., earth-lined, concrete, underground pipe)
 - b. The length of each canal
 - c. The water type supplied (e.g., ground water, natural stream runoff, etc.)
 - d. Any known or suspected water quality concerns

III. Layout of Surface Drainage Systems

1. Map(s) showing the location, layout and direction of flow of the surface drainage (tailwater) collection system. The map should include:
 - a. Layout of the surface drainage system within the district or drainage basin

- b. Location of surface drainage entering the district or drainage basin and a notation as to its origin
 - c. Designation for each portion of the drainage system whether the drains are natural channels being used to transport surface drainage or whether it is a drain constructed for the purpose of carrying surface drainage water
 - d. Notation as to the identifying name or designation for the drain
 - e. Fields tributary to specific drains (direction of flow in the field) and inflow points to the drains.
 - f. Designation for the location of entry points for discharges other than tailwater flows (Dairy or municipal wastewater, urban storm runoff, drainage wells, etc.)
 - g. Location of discharge points from the district or drainage basin
2. Map(s) showing the location and flow direction of the collection systems that are used for subsurface drainage water. This map should include (but not repeat those designated in No. 1, above):
- a. Location of farmland with subsurface drainage systems and location of farm system outlet
 - b. Designations for when the collection system is a joint surface-subsurface collection system
 - c. Location of discharge points from the district or drainage basin
 - d. Location of points where subsurface drainage enters the district or drainage basin as collected surface flow

IV. Operation of the Surface Drainage System

1. In tabular or narrative form, describe the following for both the constructed drains and the natural channels carrying drainage water:
- a. Total length of drains within the district or drainage area, listed by drain name or designation shown on the map (see III-1-d) and their type of construction (concrete, earth-lined, piped, etc.)
 - b. Total acreage flowing into a drain listed by drain or the designation shown on the map (see III-1-d), where possible, the actual tributary area should be shown on the map [see III-1-e]) that passes these locations
 - c. For each location where water enters or leaves the district or drainage area boundaries, estimates of monthly and annual volumes of surface and subsurface drainage water
 - d. Description of the types(s) of water carried in the drain (e.g., Ag tailwater, subsurface tile drainage water, municipal or industrial wastewater, dairy wastewater, stormwater, etc.)
 - e. For both the constructed drains and the natural channels carrying surface drainage water, designate whether flow occurs in these year round. If less than year round, define the portion of the year
 - f. Designate for each portion of the drainage system: whether maintenance operations are conducted, the type of operation, the frequency of these operations, and whether these operations re likely to impact drainage water quality
 - g. Denote any known or suspected water quality concerns for any drainage channels within the district or drainage basin (e.g., excess sediment, elevated TDS, elevated

boron, etc.)

V. Water Quality Monitoring Program

1. Map showing the location and identifying number of all water quality and flow monitoring points for:
 - a. Supply water to the district
 - b. Collected subsurface and surface drainage entering the district
 - c. Surface water drainage system
 - d. Drains carrying subsurface drainage water or blended water
 - e. Discharge points from the district or drainage basin
2. Summary for each monitoring location and identifying number, the present frequency of water quality monitoring, parameters measured and how data is tabulated, stored and reported.
3. Summary of the available monitoring data including parameters measured, number of analyses , and inclusive dates of sampling
4. Summary of planned (future) water quality monitoring programs
5. Summary results of any aquatic life surveys that have been conducted on the district or drainage basin drains or data from similar areas that would be applicable to the drains in this area
6. Summary of any known or suspected water quality problems in district or drainage basin drains and steps being taken to correct these problems

VI. Cost of Drainage Water Management Program

1. Estimates of the cost of the report prepared for compliance with the Inland Surface Waters Plan
2. Estimates of the cost of ongoing monitoring programs
3. Estimates of the cost of future monitoring programs planned for compliance with the Plan