

Operation & Maintenance Plan Pond (Code 378)

| Landowner/Operator: | Date: |
|----------------------|--------------------------------------|
| NRCS Service Center: | Conservation District: |
| Practice Location: | Tract/Field ID: |
| | (Lat/Long or UTM Coord, or Sec/TS/R) |

Expected Lifespan

The minimum expected lifespan of this practice is at least 20 years.

A properly operated and maintained **Pond** is an asset to your property. The purpose of this practice is to collect and provide storage for runoff and/or ground water for irrigation, a water source for livestock, fish and wildlife, recreation, fire control, erosion control, flow detention, and other water quality benefits. The estimated life span of this practice is 20 years. The life of the practice can be assured and usually extended by developing and carrying out a good operation and maintenance program.

This practice will require you to perform periodic operation and maintenance to maintain satisfactory performance. The following are some requirements to help you develop a good operation and maintenance program.

Safety

1. When necessary to exclude livestock and human access, provide fencing, gates and other barriers. Inspect fence and gates at least once a year. Repair and/or replace damaged fences and gates as soon as possible. Keep gates closed at all times.

Operation

- Install practices in the drainage area up gradient of the Pond to minimize accelerated erosion and to minimize sediment from accumulating in the pond. To minimize sediment delivery maintain a vigorous growth of desirable vegetation and minimize disturbed soil immediately upslope of the pond.
- 2. Remove of sediment when it reaches predetermined storage elevations
- 3. Use control gates to regulate pond level as needed.
- 4. Contact your local fire department and insurance agent for regulation and guidance regarding fire protection.
- 5. Maintain the design freeboard of the pond. Do not impede the flow of water, lower the crest of the embankment or otherwise change the pond in any way that will cause the normal pool elevation to encroach on the design freeboard of the pond.

Inspection and Maintenance

- 1. Inspect the principal and auxiliary spillways at least once a year and after each major storm event. Repair any erosion or damage immediately.
- Inspect embankment for settlement or cracking at least once a year and after each major storm event. Repair damage as needed. If necessary, import additional fill to repair damage. Check for excessive soil being transported downstream around the outside of the principle spillway. If excessive seepage and soil accumulation is observed near the downstream toe, contact your local NRCS office immediately.
- 3. Inspect the outlets of all foundation drains. Observe for soil particles which are being carried through the embankment via through the drains. Repair or replace drain system, if not functioning properly. Contact your local NRCS office if the transport of soil appears excessive. Inspect all rodent guards. Repair or replace as necessary.
- 4. Exclude livestock from pond area. Supply livestock water via pump or gravity system to an

appropriate stable area away from the pond.

Maintenance

- 1. Exercise all control gates at least once a year.
- 2. Remove any debris, obstructions or blockages from spillways, trash racks or pipe inlets. Also, remove any debris that may accumulate in the pond or in the exit channel immediately downstream from the pond.
- 3. Maintain a vigorous growth of desirable vegetation over the embankment and around the perimeter of the pond. Reseed barren areas as soon as possible.
- 4. Mow the vegetation over the embankment and around the perimeter of the pond at least once a year. Immediately remove any woody vegetation that starts to grow.
- 5. Eradicate or remove all burrowing animals and beavers. This may require a permit from the local Game Warden. Repair any damage caused by their activity.
- 6. Immediately repair any damage as a result of vandalism, vehicular traffic or livestock use.
- 7. Repair spalls, cracks and weathered areas in concrete surfaces.
- 8. Repair or replace rusted or damaged metal pipe and other appurtenances. Paint to protect surfaces.
- 9. Replace weathered or displaced rock riprap to its original grade.
- 10. Inspect downstream slope and abutments for seepage. Repair as needed.

Operation, Maintenance and Inspection Costs

- 1. It is estimated that the annual time to routinely inspect and make minor repairs to your Pond will be:
 - a. Inspection = 4 hours/year
 - b. Minor Repairs = 4 hours/year
 - c. Mowing = 4 hours/year
 - d. Removing Debris = 2 hours/year
 - e. Major repairs to damage caused by major storm event will require extra time and materials.
- Most minor repairs can be made by the operator using basic hand tools. However, major repairs to damaged concrete, pipe, fence, etc. may require hiring a professional experienced in these repairs and improvements.
- 3. Most maintenance, such as mowing, reseeding, debris removal, etc. can be accomplished using common farm machinery. Occasionally major damage may require heavy construction equipment to make repairs.

Specific Requirements for Your Practice

Specific Site Requirements