NATURAL RESOURCES CONSERVATION SERVICE

CONSERVATION PRACTICE STANDARD

CONNECTICUT

FISHPOND MANAGEMENT

(Ac.)

CODE 399

DEFINITION

Managing impounded water for the production of fish or other aquatic organisms.

PURPOSE

- To provide favorable habitat for fish and other aquatic organisms.
- To develop and maintain a desired species composition and ratio.
- To develop and maintain a desired level of production.

CONDITIONS WHERE PRACTICE APPLIES

In warm and cold water ponds, lakes, and reservoirs not managed for commercial aquaculture purposes.

CRITERIA

General Criteria Applicable To All Purposes

Laws and Regulations. All Federal, state, and local laws, rules, and regulations, including local inland wetland agency regulations, governing the construction and use of this practice as well as setbacks from wells, surface water and property boundaries shall be followed. Planned work shall comply with all federal, state, and local laws and permit conditions and requirements. **The landowner shall obtain all necessary permits prior to construction or any land clearing activities.**

Structures will meet or exceed the requirements of the Connecticut NRCS Standard 378, Pond.

Implement State Aquatic Nuisance Species Management Plan recommendations.

Protect the site from flooding, sedimentation, and contamination.

Control undesirable aquatic vegetation.

Criteria to Develop and Maintain a Desired Species Composition and Ratio

Limit species for stocking to those that are adapted for use in ponds, lakes or reservoirs in your State or area.

Species selection(s) and stocking rates shall follow a pond management plan developed with the client and in accordance with appropriate State agency policy and guidelines.

Develop species(s) selection and stocking rates with respect to the size, depth, water temperature, and water quality of the area to be stocked.

Criteria to Develop and Maintain a Desired Level of Production

The desired level of production shall be maintained through liming, fertilization, slot limits, harvesting, or supplemental feeding. Desired water quality conditions (e.g., dissolved oxygen level, pH, alkalinity, etc.) reflect local conditions and should be addressed in the pond management plan.

Aquatic organism health issues directly affect production levels and need to be included in the pond management plan. Proper diagnostic

sampling procedures should be followed during fish kills and when submitting samples to diagnostic labs.

CONSIDERATIONS

Consider the use of native species whenever possible.

Consider alternatives to the use of pesticides in the drainage area above the site, which may have negative impacts to water quality and aquatic organisms.

Consider the use of erosion control and nutrient and pest management practices in the watershed to maintain water quality.

Consider the effect of additional uses (e.g., livestock watering, recreation, irrigation, etc.) on the fish and/or aquatic organism population.

Consider the use of appropriate water treatment practices below structures to ensure that discharges from ponds, lakes, and reservoirs will meet state water quality standards.

Consider methods to prevent the fish in the pond, lake, and reservoir from escaping or being introduced into adjoining waters where native species might be adversely affected.

Consider providing additional fish and wildlife habitat within or around the impoundment for cover and breeding purposes. Grassy cover around the impoundment that may provide nesting habitat should not be mowed until after the primary nesting season.

PLANS AND SPECIFICATIONS

Plans and specifications shall be in keeping with this standard and shall describe the requirements for applying the practice to achieve its intended purpose. Plans and specifications shall include construction plans, drawings, job sheets or other similar documents. These documents shall as a minimum, specify the requirements for installing the practice and include the kind, quantity and quality of materials to be used.

To the extent practical, specifications shall conform to NRCS National Engineering Handbook Parts 642 and 643 (Section 20).

A pond management plan will be prepared using approved specification sheets, job sheets, technical notes, narrative statements in the conservation plan, or other documentation.

The plan will include:

- A location map and plan view of the site;
- Statement of purpose that describes the species(s) desired and management goals;
- Evaluation methods (observation, seining, electroshocking, catch record, etc.) for determining the population dynamics of fish and other aquatic organisms;
- Reference to State Aquatic Nuisance Species Management Plan recommendations, if applicable; and
- Permit requirements and regulations, if applicable.

AS BUILT DRAWINGS

As built drawings shall be prepared which show all pertinent elements and elevations as actually installed. A copy shall be provided to the owner / operator upon construction completion.

OPERATION AND MAINTENANCE

An Operation and Maintenance (O&M) plan shall be prepared for, reviewed and signed by the landowner or operator. The plan shall specify that the treated areas and associated practices are inspected annually and after significant storm events to identify repair and maintenance needs. The plan shall provide for prompt repair should fish passage become impaired or inoperable at the structure or site.

The O&M plan shall detail the level of repairs needed to maintain the effectiveness and useful life of the practice.

Develop an operation and maintenance plan that includes the following actions that are required for the successful management of the pond, lake, or reservoir:

1. Evaluation of habitat conditions on a regular basis;
2. Management of fish or other aquatic organism populations;
3. Supplemental feeding where applicable;
4. Removal of undesirable and overpopulated organisms;

5. Management and control of aquatic vegetation;
6. Application of fertilizer and lime;
7. Monitoring and maintenance of desired water quality conditions (e.g., dissolved oxygen level, pH, alkalinity, etc.);
8. Periodic inspection and maintenance of structural components (e.g., water level control equipment); and
9. Detection and identification of fish pathogens and instructions for collecting and preserving samples.

REFERENCES

A Manual of Fish Culture. Fish Culture Section, American Fisheries Society, 1999.

Inland Fisheries Management in North America, Second Edition. Chapter 21, Small Impoundments. Kohler, C.C. and W.A. Hubert, editors. American Fisheries Society, 1999.

Managing Aquatic Vegetation with Grass Carp. J.R. Cassani, editor. American Fisheries Society, 1996.

Mississippi Interstate Cooperative Resource Association: Summary of Permit Authority and Prohibited Species by State with Special Emphasis on Asian Carp. Aquatic Nuisance Species Task Force, 2000.

Suggested Procedures for the Detection and Identification of Certain Finfish and Shellfish Pathogens (Blue Book). Fish Health Section, American Fisheries Society, 2004.