



UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
Southwest Region
P. O. Box 728
Santa Fe, New Mexico 87504-728

Interoffice Memorandum

Date: August 18, 1986

Reply to
Attn of: RMP Coordinator, Southwest Region
Subject: Aquatic Vegetation Control Plan

To: Superintendent, Jean Lafitte

Attached is your approved original Aquatic Vegetation Plan. Keith Miller noted that information is missing in Item E, page 2, and the number of miles in the Description of the Proposal.

I will add this plan to your RMP as an Action Plan.


Gerard A. Hoddenbach

Enclosure

JEAN LAFITTE NHP
1986 SEP -1 A 10:51
RECEIVED



AQUATIC VEGETATION CONTROL PLAN
BARATARIA UNIT, JEAN LAFITTE NATIONAL HISTORICAL PARK

1986

SCOPE:

All provisions of this plan are applicable to the management of certain aquatic vegetation species within the Barataria Unit, Jean Lafitte National Historical Park.

The plan is primarily intended to provide direction, purpose and operational guidelines for program activities.

POLICY:

The National Park Service has a dual responsibility relative to aquatic vegetation control within the Barataria Unit. Primarily, the service is responsible for the eradication of exotic species, and the park's General Management Plan (GMP) also charges park management with the designation of and maintenance of canoe trails.

This management policy is based on the premise that given the environmental conditions which readily support rapid growth, the aquatic vegetation in and near watercourses (bayous, canals, ponds) in the Barataria Unit, such vegetation if not directly controlled will render these watercourses impassable for most of the year.

The service has adapted a position which seeks alternative control methods in lieu of use of herbicides whenever and wherever possible. The park is committed to such an alternative program and this plan is in support of that program position.

Specific Programatic objectives for the control of aquatic vegetation within the Barataria Unit include, but are not limited, to the following:

- A.) Reduction or elimination of the use of chemical control agents for suppression of aquatic vegetation.
- B.) Development of a viable alternative control/program to include mechanical removal of vegetation and the introduction of biological control agents.
- C.) Provide recreational opportunity for the canoeist, boater and fisherperson with minimum difficulty.
- D.) Eliminate/control exotic species from within the park ecosystem.

AUTHORITIES:

- A. Public Law 95-625 (61 USC 23)
- B. Executive Order 11987
- C. NPS Management Policies

Exotic Plants and Animals (IV-11)

PESTICIDE USE (IV-13)

DEFINITIONS:

- A. Park Aquatic Vegetation Control Plan: An overall description of the Park (Barataria Unit) control plan

including an assessment of the desirability and relationships of control activities to other park management objectives.

- B. NEPA Compliance: An Environmental Assessment (EA) of the anticipated impacts of the park aquatic vegetation control activities
- C. Park: A general term to include the management oriented members of the park staff (e.g. Superintendent, C, I/VP, C, R/M, Engineer, Unit Mgr. BARA)
- D. General Plan Conditions: The general requirements and stipulations of the plan which regulate and govern the activities of persons and equipment involved in the control of aquatic vegetation.
- E. Mechanical Device: Equipment employed to gather, remove or otherwise manipulate aquatic vegetation species.
- F. Biological Control: Those animal or plant species introduced for the specific purpose of providing control of exotic aquatic vegetation.
- G. Open Watercourse: A bayou, canal or any combination thereof which allows for the passage of either powered or non powered vessels. (Management may restrict specific waterway uses to specific vessels.)

RESPONSIBILITIES:

Officials and individuals listed herein are responsible for the functions and activities as described and indicated.

A.) Superintendent:

1. Approves plan.
2. Signs and recommends approval of
NEPA documents. (EA & FONSI)

B.) Chief, Resource Management:

1. Prepares and recommends Aquatic
Vegetation Control Plan.
2. Monitors environmental, ecological
conditions.
3. Periodic review of operations,
recommends seasonal operational
variances.

C. Chief, Interpretation, Visitor Protection:

1. Responsible for execution of the approved plan.
2. Responsible through the Unit Manager for the safe
operation of all equipment.

D. Unit Manager, Barataria:

1. Responsible for actual on site equipment
operations, and employee training.
2. Keeps Chief, R/M advised of potential
waterway closures due to vegetation.
3. Assigns personnel to operational activi-

ties in accordance with plan.

E. Harvester Operator:

1. Has completed sufficient training to be capable of and able to operate equipment safely and properly.
2. Works within the program/plan guidelines, minimizing damage to the ecosystem/equipment.

FORMS:

An equipment log will be maintained for the Harvester.

Operators will estimate the volume of biomass manipulated.

PROGRAM OPERATIONS:

The plan/program will involve three distinct sub-programs or interacting function operational elements:

- 1.) Removal of downed tree limbs from watercourses.
- 2.) Manipulation of emergent and submergent aquatic vegetation.
- 3.) Observation of and manipulation of the introduced populations of biological control species:
Neochetina bruchi; N. eichhorniae
Semeodes albiguttalis; Amynothrips
andersoni; et al.

Primary Element: Designated watercourses are to be surveyed and all downed trees, limbs and other debris are to be removed or clearly marked.

March/April

Secondary Element: Population dynamics study of control species. May thru October

Tertiary Element: Manipulation of emergent and submergent aquatic vegetation. May thru October

Specific Watercourses:

Kenta Canal	Bayou Coquille
Upper Pipeline Canal	Bayou Des Familles
Pipeline Canal	Twin Canals
Tarpaper Canal	

<u>Priority one:</u> Kenta Canal	<u>Priority three:</u> Pipeline Canal
<u>Priority two:</u> Upper Pipeline Canal	Bayou Coquille
Tarpaper Canal	<u>Priority four:</u> Cooperative Sites

Due to hydrological conditions and certain topographic aspects of specific waterways the workload for each of the target areas will be distinct and separate, requiring at least several seasons (growth years) before a fine tuned work schedule can be organized.

GENERAL OPERATIONS:

Primary Element: The clearing of identified watercourse obstruction will be accomplished on site by designed personnel employing a variety of hand tools and mechanical devices. THE HARVESTER IS NOT TO BE EMPLOYED OR ENGAGED IN THIS ACTIVITY.

Secondary Element: Designated employees involved in these activities will not move or transplant vegetation or control species without direct approval and direction from the program coordinator.

Tertiary Element: Employees accomplishing these tasks will be operating the harvester machine, no other vessel or mechanical device will be employed unless specifically designated and approved by the Superintendent.

A.) Standard Operations:

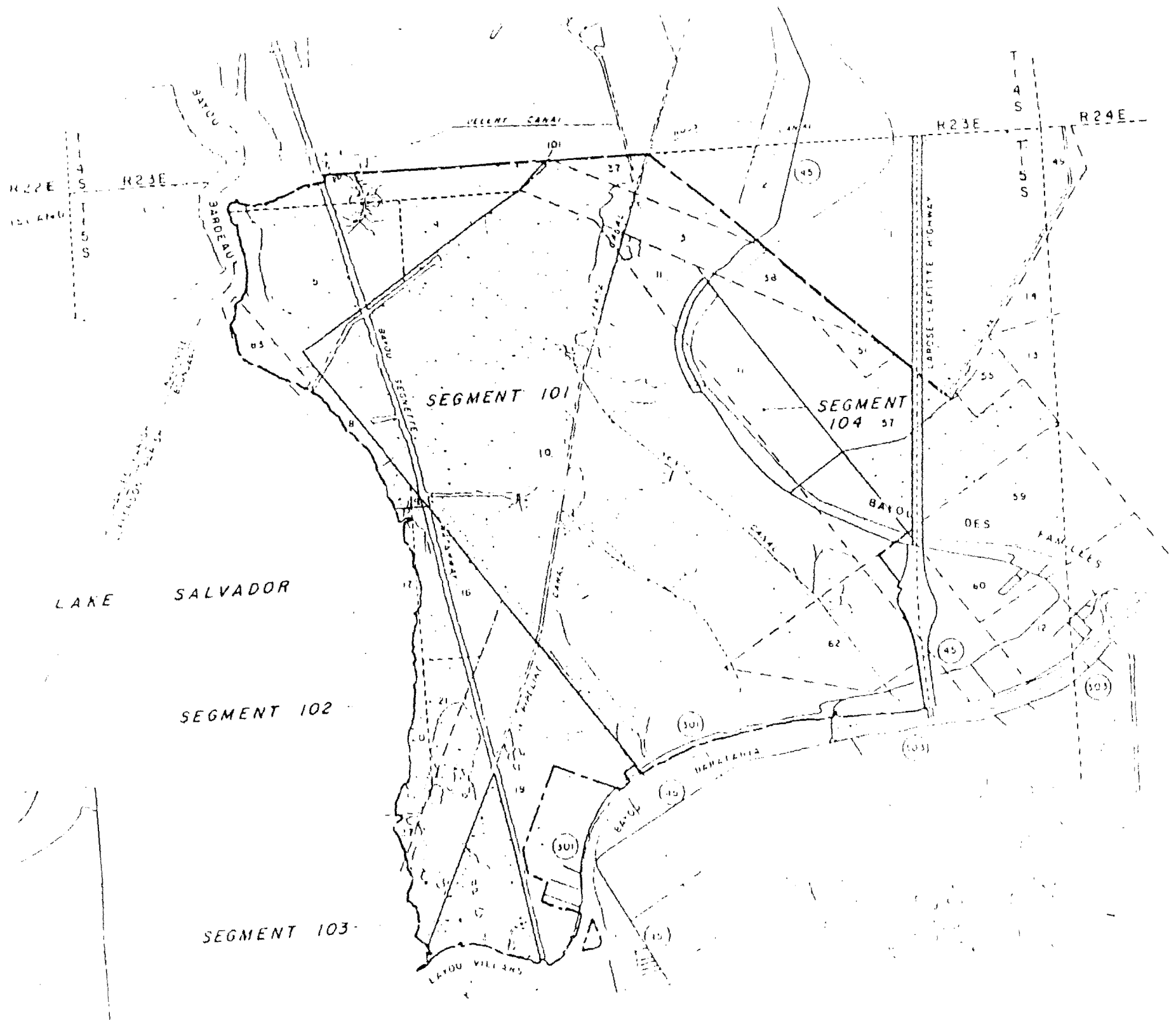
- 1.) Watercourses will not be entered unless cleared of downfalls and debris as described the Primary Element.
- 2.) Minimum water levels are very critical as are maximum levels, a specific operations criteria will be developed. For the initial operations activities the harvester will not operate in waterways when the Kenta Canal (gage Z) gage is at or below + 1.2' or above + 2.5'.
- 3.) Vegetation manipulation activities will be confined to the center (middle) 2/3 of the watercourse.
- 4.) Vegetation disposal will be along the water-

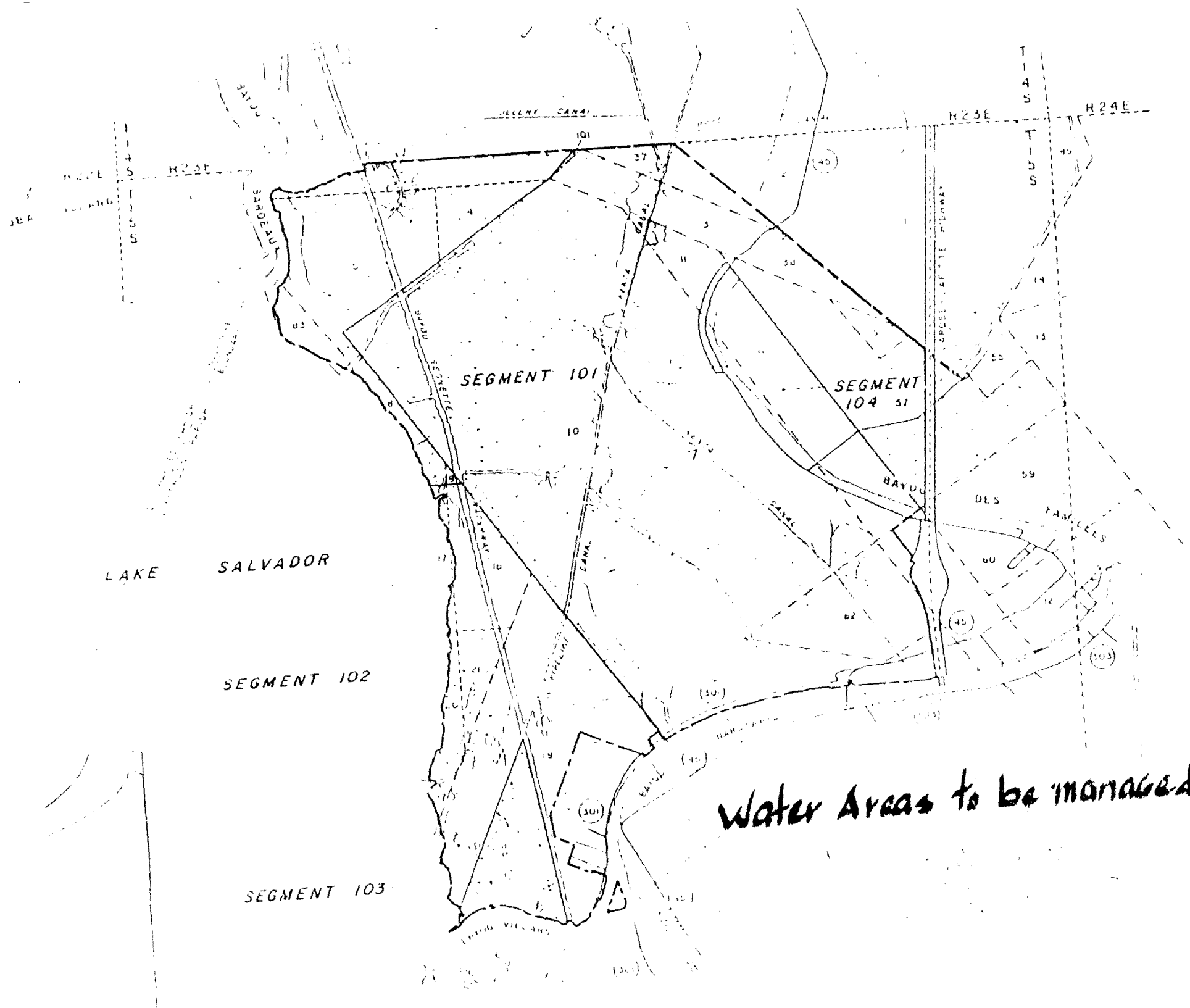
course at random; however, care should be taken to prevent excessive stacking which can cause terrestrial vegetation damage and will be aesthetically displeasing to visitors.

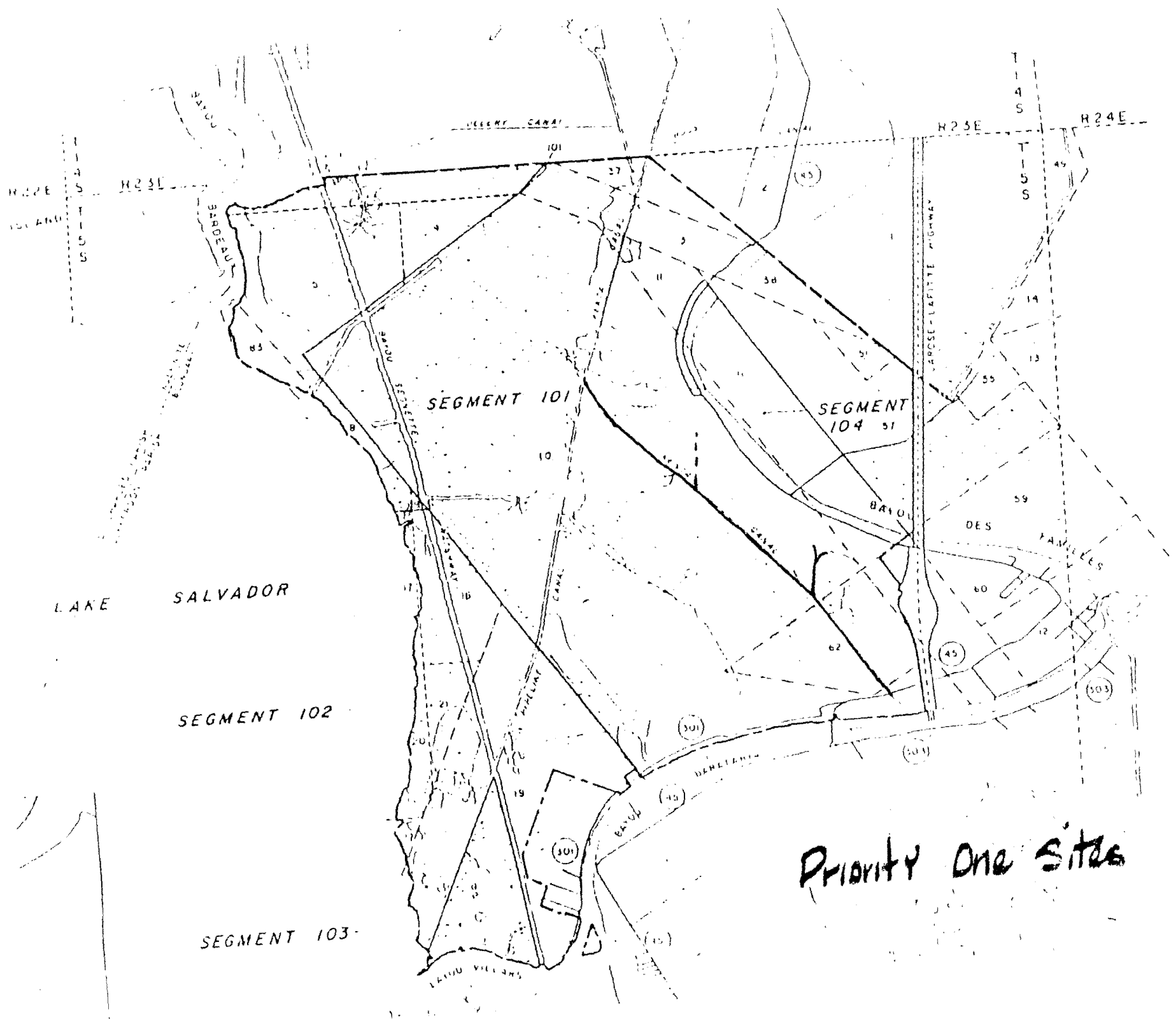
- 5.) The harvester operations should meet or exceed all recommended manufacturer's specifications and should always promote visitor and employee safety.

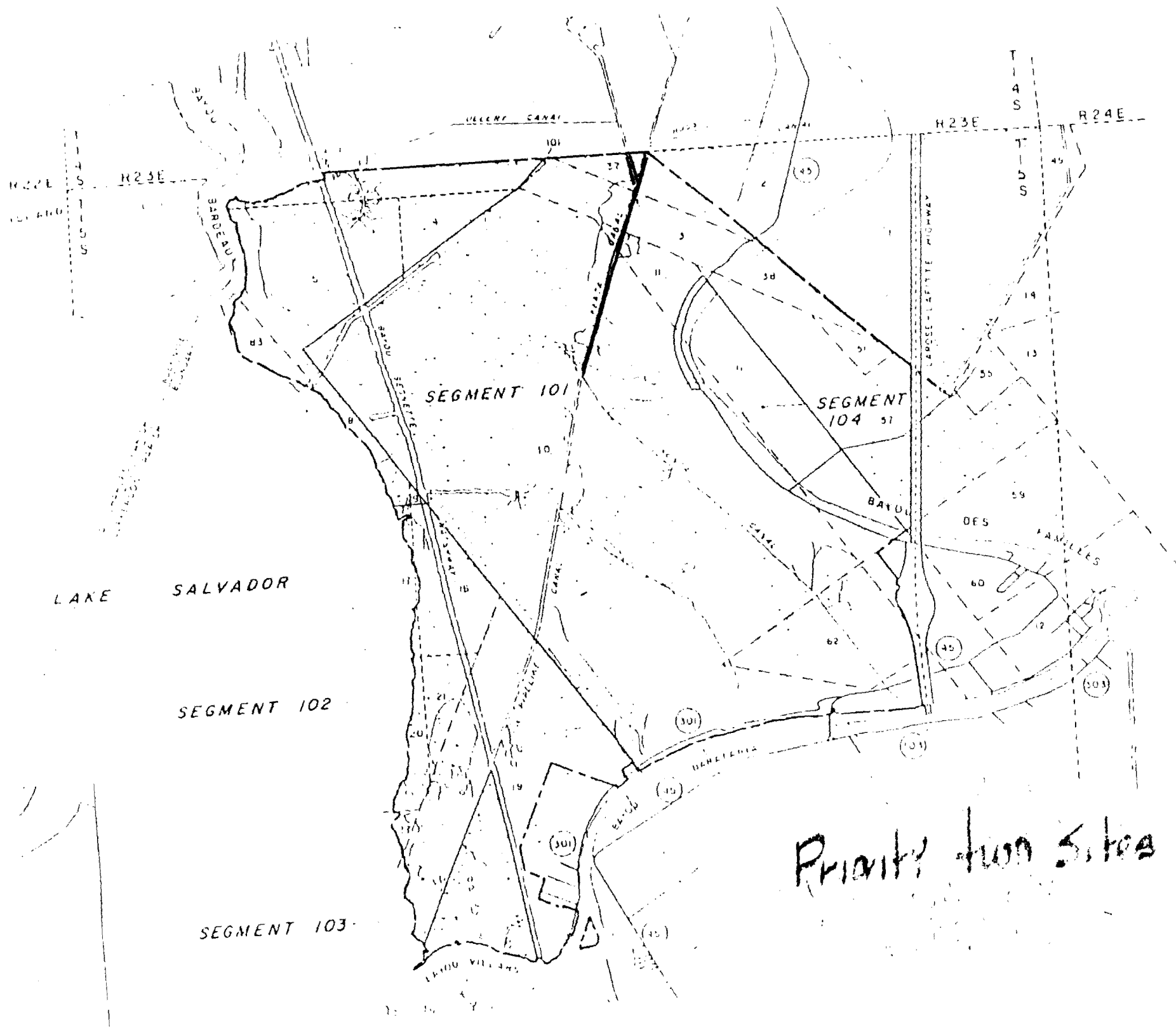
AQUATIC VEGETATION/INTRODUCED CONTROL/STATUS IN ECOSYSTEM

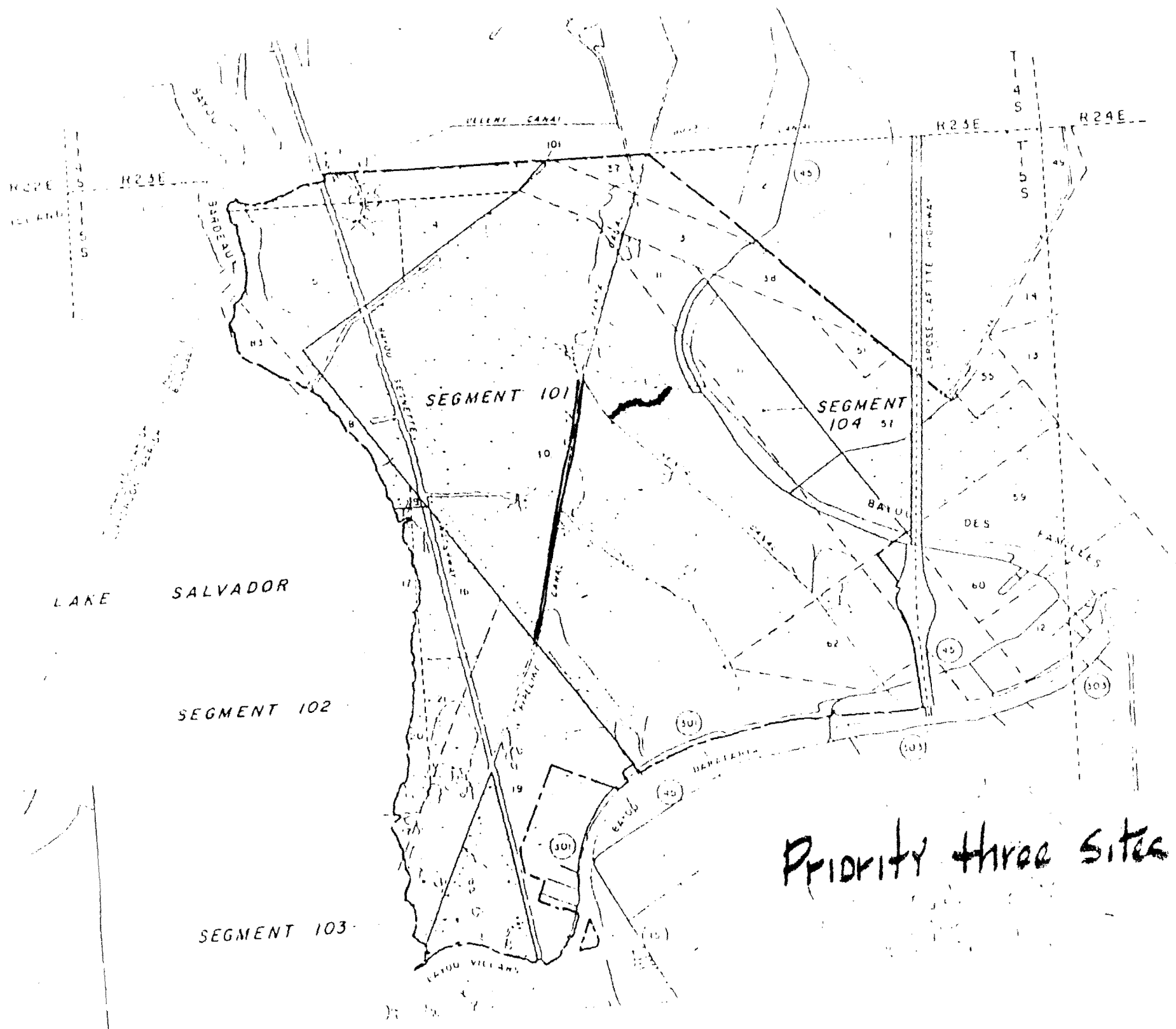
Common Name	Scientific Nomenclature	Introduced	Ecosystem
		Control	Status
Waterhyacinth	<u>Eichhornia crassipes</u>	<u>Neochetina eichhorniae</u>	exotic
		<u>N. bruchi</u>	
		<u>Sameodes albiguttalis</u>	
Alligatorweed	<u>Alternanthera</u> <u>philoxeroides</u>	<u>Agasicles hygrophila</u>	exotic
		<u>Vogtia malloi</u>	
		<u>Amynothrips andersoni</u>	
Marsh Pennywort	<u>Hydrocotyle sp</u>		native
Fanwort	<u>Cabomba caroliniana</u>		native
Hydrilla	<u>Hydrilla verticillata</u>		
Common Duckweed	<u>Lemna sp</u>		native

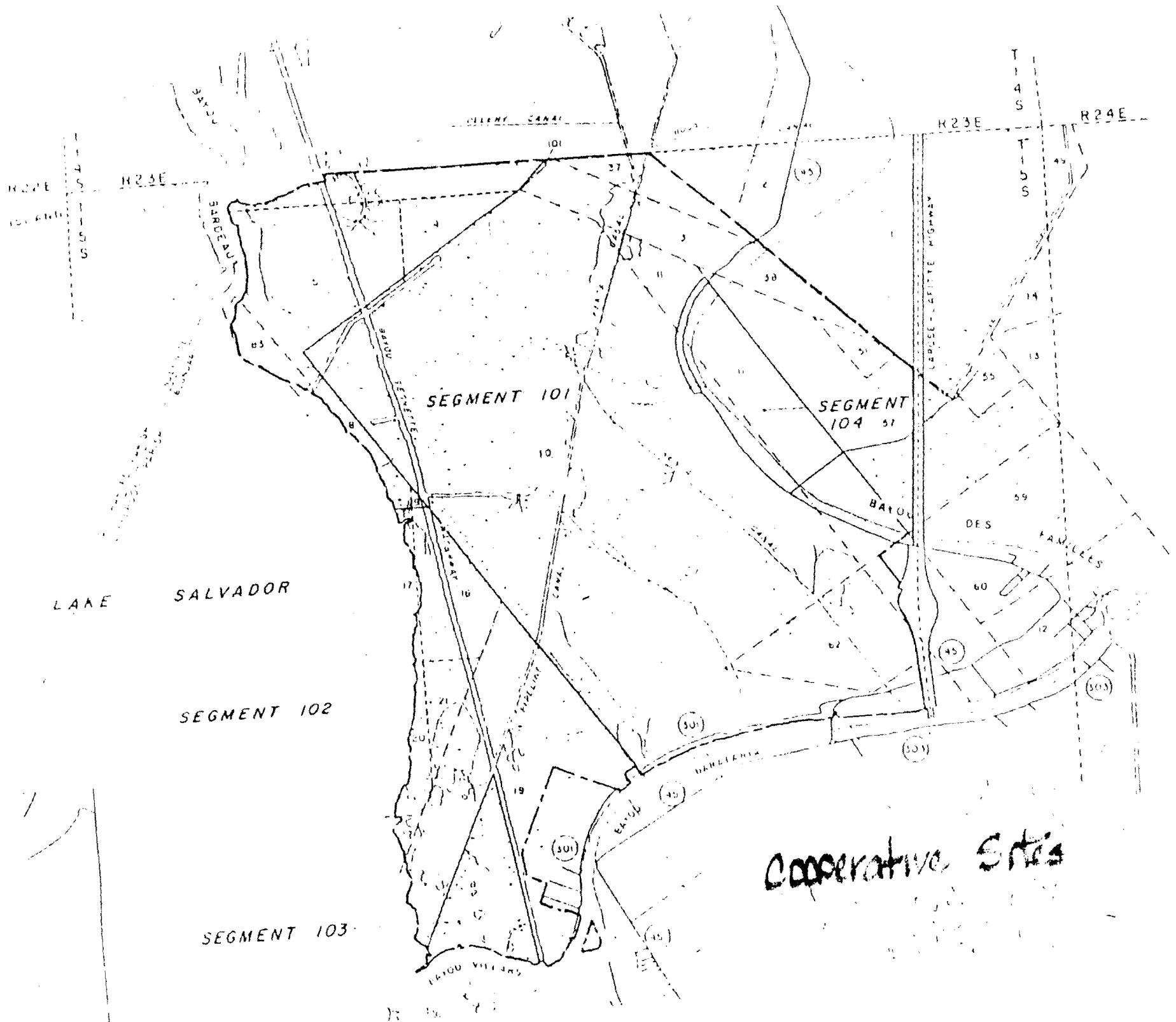


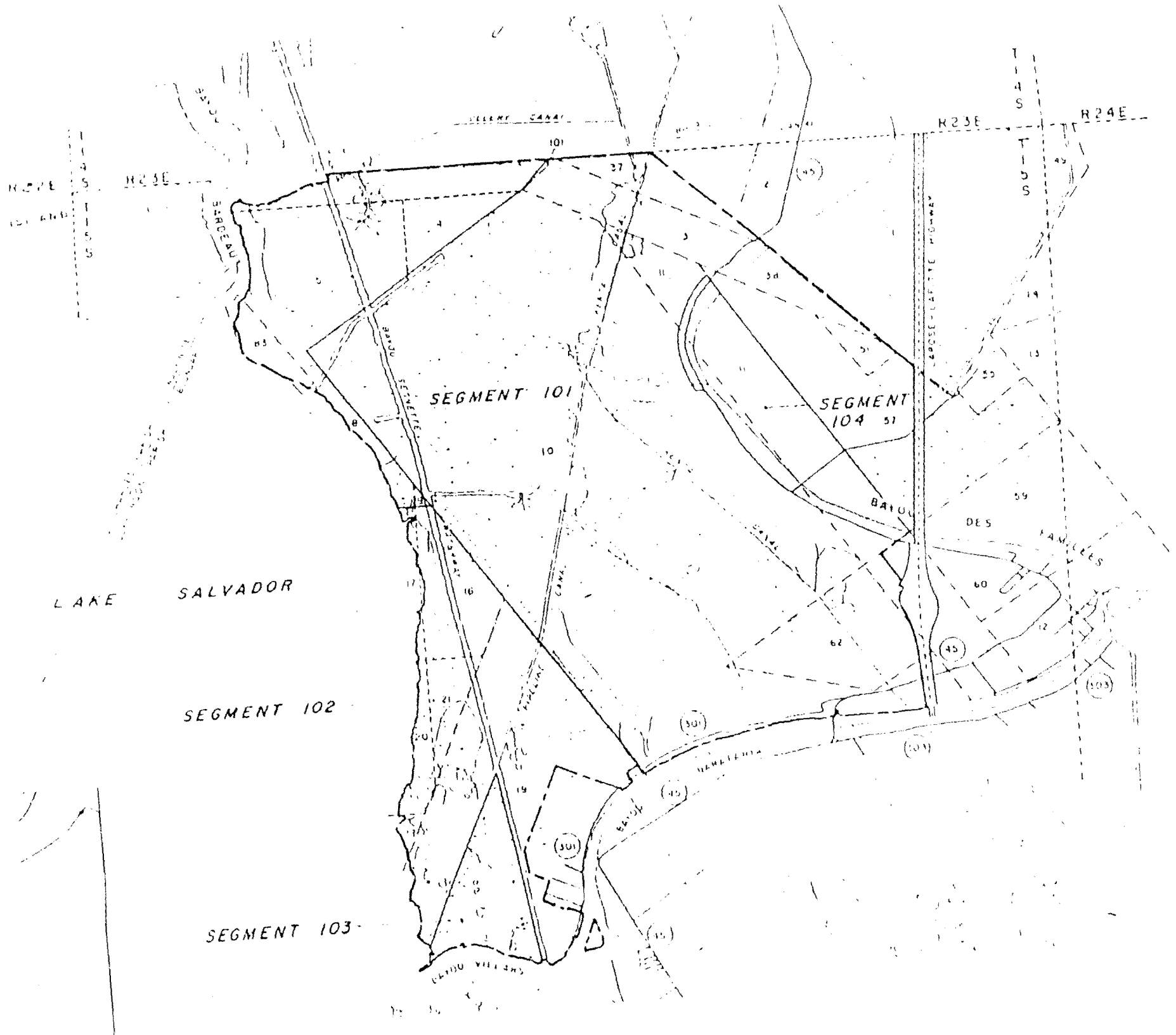












ENVIRONMENTAL ASSESSMENT
AQUATIC VEGETATION CONTROL PLAN
BARATARIA UNIT
JEAN LAFITTE NATIONAL HISTORICAL PARK
1986

ENVIRONMENTAL ASSESSMENT

For the establishment of Aquatic Vegetation control activities in the Barataria Unit, Jean Lafitte National Historical Park.

Description of Proposal:

The Unit has approximately 32.8 miles of watercourse which are used for a variety of water related recreational purposes. These watercourse provide ideal ecological conditions which support rapid growth of both native and exotic aquatic vegetation.

This plan is intended to provide management with an integrated approach to vegetation control which does not employ chemical agents.

The plan includes the dispersal of biological agents and the employment of a mechanical harvester to maintain selected watercourses to permit recreational use.

Description of the Environment:

The Barataria Unit is a complex of marsh-swamp and bottom hardwood habitats situated along and adjacent to the remnant of the Bayou Des Familles natural levee. It includes portions of both the Bayou Des Familles swamp and the Bayou aux Carpes swamp.

The ecology of the three habitats is typical of that found throughout southern Louisiana. Spoil bank vegetation approximates that of the natural levee areas. The watercourses are characteristically shallow, the water flaccid;

and deficient in oxygen. These conditions tend to provide ideal conditions to support eutrophication.

The absence of natural predation on the exotic species and the profound growth potential create a biomass which readily closes large sections of some watercourses.

Environmental Impacts of the Proposed Action:

There should be both beneficial and adverse impacts expected.

Potential Adverse Impacts:

- Temporary mixing and disturbance of water, creating increased turbidity.
- Audio disturbance from equipment.
- Minor damage to riparian vegetation and submergent aquatic vegetation.
- Piling of vegetative material on levee (spoil bank) surfaces, potentially hazardous to trees and shrub vegetation.

Potential Beneficial Impacts:

- Clearing of surface vegetation which tends to deplete oxygen levels in water, thereby increasing those levels.
- Providing open water for aquatic species, amphibians, reptiles and avians for feeding and other essential activities.

Unavoidable Adverse Effects:

Some temporary localized disturbances will create unavoidable impacts on a variety of inhabitants.

The placement of the "harvested" bromass on the levees can cause vegetation and tree damage.

Short Term Versus Long Term Productivity:

If anything, this action plan will enhance the ecosystem and provide for recreational use.

Irreversible and Irretrievable Committments:

There are no such committments. The annual plan review will more than adequately provide for ecosystem protection needs.

Alternatives Considered:

1. Control by Application of Herbicides: This approach has short-term success; however, those chemical agents which are effective are not approved for use in NPS areas.
2. No Action: This approach would not satisfy several management criteria: provide for recreational use; control and eradicate exotic species.

Consultation and Coordination:

The Delta Region Preservation Commission, a citizens advisory committee to the Park which represents the public interest, reviewed and approved the proposal.

FINDING OF NO SIGNIFICANT IMPACT
FOR THE
AQUATIC VEGETATION CONTROL PLAN
BARATARIA UNIT, JEAN LAFITTE NATIONAL HISTORICAL PARK

The National Park Service is proposing to control the aquatic vegetation in the several waterways within the boundaries of the Core Area of the Barataria Unit, Jean Lafitte National Historical Park. This activity is considered to be necessary and pertinent to good management of the Barataria Unit.

An Environmental Assessment has been prepared, and the proposed program has been reviewed by the Delta Region Preservation Commission, an advisory committee to the Park which represents the public interest.

The anticipated impacts are expected to be minor and to have little or no significant environmental consequences. There will be no effects on endangered species and the proposal does not conflict with the parameters set forth in Executive Orders 11988 or 11990.

The proposed action will have no significant effect on the human environment; therefore, an Environmental Impact Statement will not be prepared.

The enabling legislation requires the continuation of "traditional uses"; therefore management has not seriously considered any alternatives. It has chosen to develop a plan whereby the activities can be permitted and the resources can be equally protected.

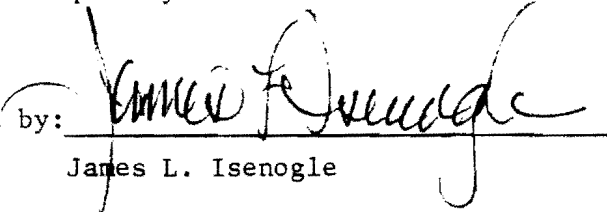
CONSULTATION AND COORDINATION:

The Delta Region Preservation Commission has reviewed the program proposal.

DETERMINATION OF NEED FOR ENVIRONMENTAL IMPACT STATEMENT:

Based on this Assessment, it has been determined that an Environmental Impact Statement (EIS) is not required for the Aquatic Vegetation Control Plan. The anticipated environmental impacts will not be significant, and will not affect the quality of the human environment.

Recommended by:


James L. Isenogle

Superintendent, Jean Lafitte

National Historical Park

5/9/86
Date

Approved by:


Regional Director, Southwest Region

National Park Service

8/13/86
Date