

2021 Lake Worth Lagoon Management Plan Watershed Management Approach

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INTRODUCTION

The fourth iteration of the Lake Worth Lagoon Management Plan was adopted by the Palm Beach County Board of County Commissioners on July 13, 2021. The first management plan was adopted in 1998, followed by three updates in 2008, 2013 and most recently 2021. The Plan can be accessed at LWLI.org

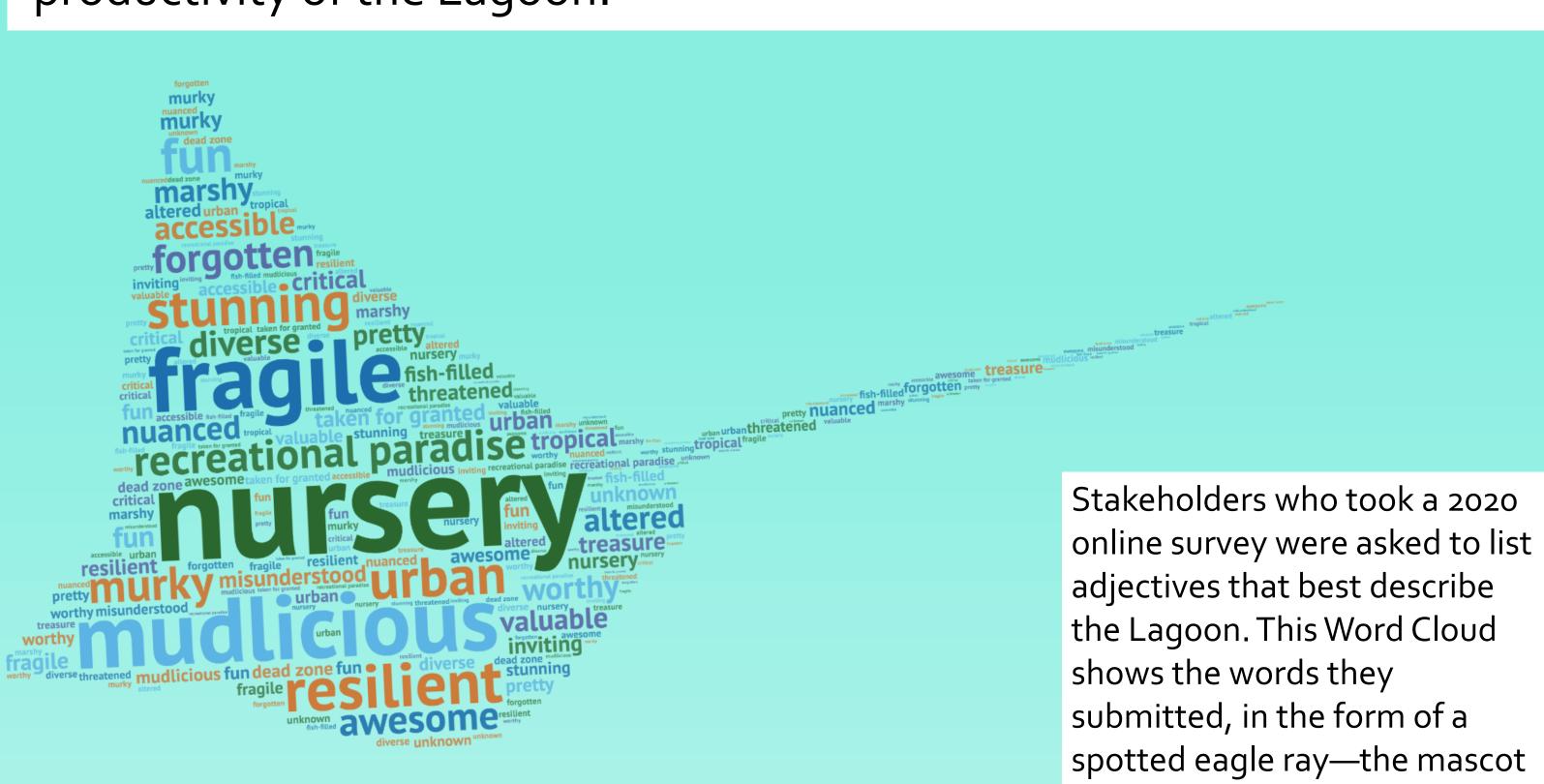
This latest plan identifies the priorities for the management, restoration and protection of the Lagoon for the next decade. This is the first plan to strategically include a watershed based management approach that looks beyond the Lagoon's boundaries to incorporate its watershed in its management. This is a critical step since the health of the Lagoon is intrinsically linked to the land use characteristics and inputs received from its vast watershed that is 42 times the size of the Lagoon itself.

The Lagoon is bordered by 13 municipalities, from the Village of North Palm Beach in the north to the Town of Ocean Ridge in the south, but its watershed includes over 30 municipalities and unincorporated areas, in addition to 8 independent drainage or water management districts. There are close to 1 million residents that are part of the Lagoon's watershed and hence linked to the Lagoon.

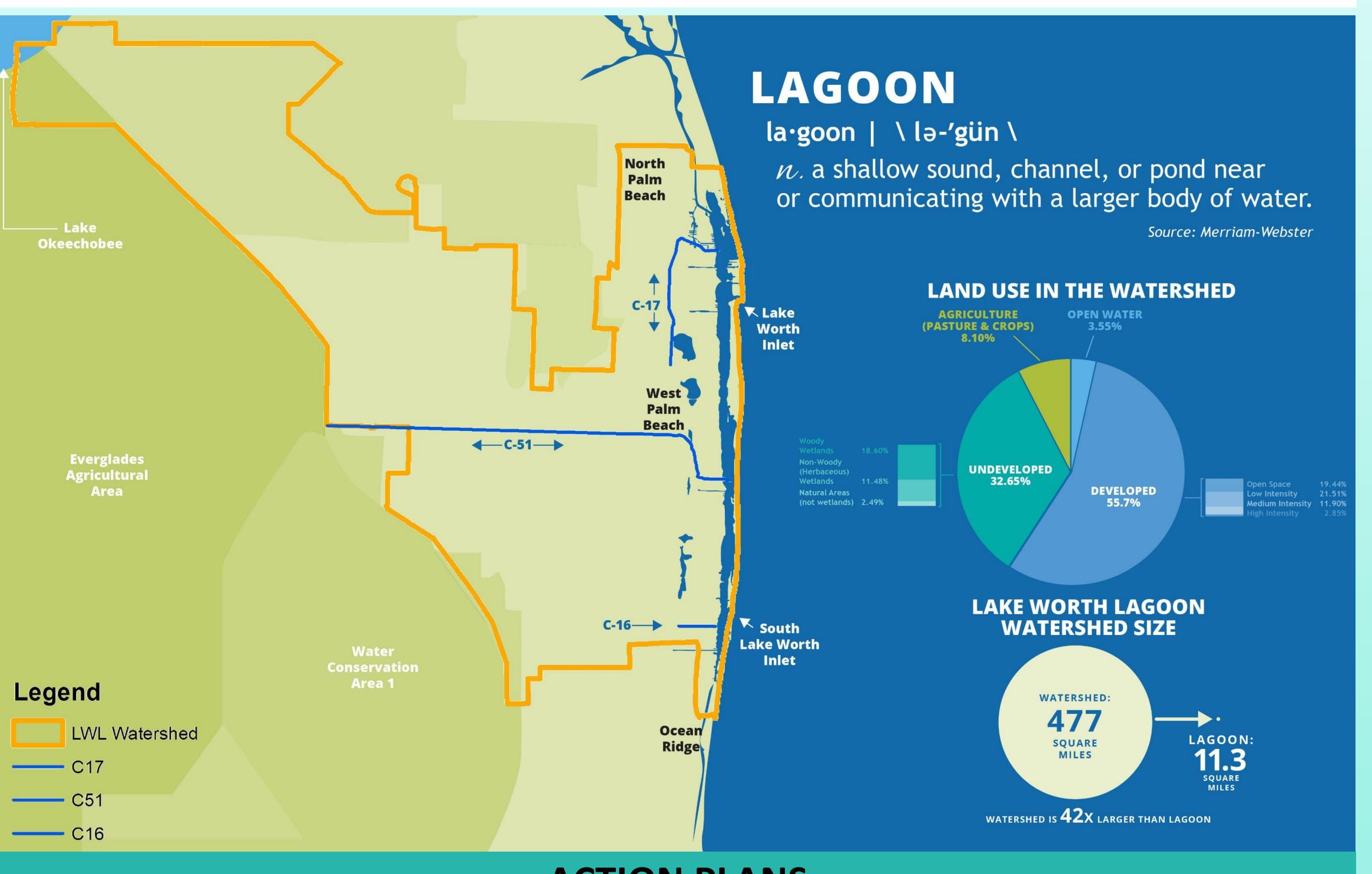
WATERSHED MANAGEMENT APPROACH

This approach elevates the importance of expanded monitoring to better understand and respond to the myriad of factors that influence Lagoon health. The Lagoon's watershed can have an outsized effect on its health, as freshwater from the watershed carries with it sediments, nutrients and pollutants that impact the estuary. Water quality parameters routinely monitored include nutrients and salinity. Real time water quality data for the lagoon can be viewed at LWL
Water Quality Dashboard (LWLI.org)

Additionally, the County and Lake Worth Lagoon Initiative partners continue with long-term biological monitoring for oysters, seagrass, fisheries, birds and turtles, all linked to assessing the health and productivity of the Lagoon.



LAKE WORTH LAGOON WATERSHED



ACTION PLANS

The plan lays out 25 action plans that identify the management priorities for the Lagoon. The Plan presents achievable goals and actions for improving water quality, enhancing habitat, protecting fish and wildlife, preparing for a changing climate, and fostering public awareness and responsible enjoyment of the Lagoon.



WW-2 Identify Priority

STORMWATER

Areas for Conversion of

Septic Systems to Central

SW-1 Reduce Stormwater

Low Impact Development

SW-2 Expand Use of

Sediment Loading

*Renamed from 2013 Plan

R AND SEDIMENT QUALITY

WATER QUALITY WQ-1 Expand Water Quality Monitoring *Renamed from 2013 Plan WASTEWATER WW-1 Assess and Reduce Occurrence of Sewer Overflows *Renamed from

WQ-2 Develop a Watershed-Based Modeling Program *NEW

WQ-3 Implement Best
Management Practices for
Drainage Canals *NEW

WQ-4 Monitor and Assess
Ways to Reduce Bacterial
Contamination and
Harmful Algal Blooms *NEW

WQ-5 Identify and Assess the Impacts of Emerging Contaminants *NEW

of the Lake Worth Lagoon.

WQ-6 Manage Freshwater
Inflows to Optimize
Environmental Benefits
*NEW

2013 Plan

SEDIMENT
MANAGEMENT

SE-1 Assess and Manage

PROTECTION

NHANCEMENT AND FISH AND WILDLIFE



FW-4 Manage and Monitor

FW-5 Implement Remote

om 2013 Plan

horebird Habitat *Renamed

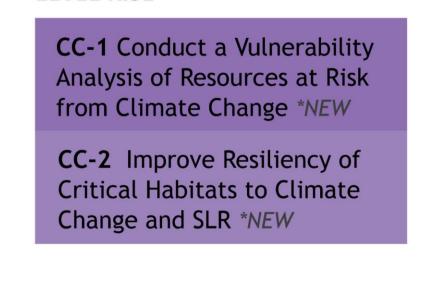
Tracking Technologies for Fish

and Wildlife Monitoring *NEW

HE-4 Acquire Ecologically Significant Submerged and Intertidal Lands *Renamed from 2013 Plan



CLIMATE CHANGE AND SEA





PUBLIC OUTREACH AND ENGAGEMENT

PO-1 Foster Public Awareness and Engagement *NEW

PO-2 Promote Youth Education and Engagement *NEW



PUBLIC USES OF THE LAGOON PU-1 Ensure Adequate and Appropriate Public Access to the Lagoon *NEW

1 Economic Valuation of Lake Worth Lagoon, Palm Beach County, FL. PFM Group Consulting LLC. 2019.

LAKE WORTH LAGOON BY THE NUMBERS



Lake Worth Lagoon is a unique urban estuary of significant ecological and economic value. A 2019 Economic Valuation study estimated the value of recreational uses and business activities related to the Lagoon at \$813.9 million per year¹.

SUMMARY

The successful implementation of the action plans and specific strategies identified for management of the Lagoon, including restoration of water quality, protection of fish and wildlife and enhancement of its unique estuarine habitats requires coordinated efforts from all of the agencies with management responsibilities, including local, state, regional, and federal entities as well as the stakeholders and community that work, live and enjoy the natural resources found throughout the Lagoon and its watershed.

It is crucial to work towards revitalizing and maintaining this important estuary for the long term not only for the diverse environmental and biological resources found here but also for the vast quality of life, recreational and economic benefits the Lagoon provides to the residents and visitors to this region.

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