

## Attachment C – Lake Alice Watershed – Facilitation Report

Prepared for Wetland Solutions, Inc.

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Prepared by



# Lake Alice Watershed Management Plan Engagement Report



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What is your primary connection to Lake Alice or the watershed?	
The information provided in the overview presentation was clear and easy to understand.	
The critical, near-term, medium/long-term project recommendations will improve the watershed	
The operation and maintenance and funding recommendations will improve the watershed	
How would you like to be involved in the future?	
Personmendations for Engagement Next Stans	

## **Engagement Summary**

Engagement included collecting input and feedback on aspects of the project from the Project Team (PT), Steering Committee (SC), identified key stakeholders, and interested members of the public by the Engagement Team (ET), led by Jessica Stempien, owner of *Rooted in Process*, a certified Technology of Participation® (ToP®) facilitator and an endorsed facilitator by the International Association of Facilitators. Other engagement team members and their roles are listed in the below table.

## **Engagement Team Roles**

Name	Company	Engagement Role	Responsibilities
Jessica	Rooted in Process	Engagement Lead	Management of engagement aspects of the
Stempien		and Lead	project to include design and facilitation of
		Facilitator	planning team meetings, steering committee
			meetings and public engagement efforts.
Dawn	Blackhawk Facilitation	Co-Facilitator	Responsible for co-facilitation of steering
Newman			committee and public engagement efforts, as well
			as stakeholder interviews and review of
			engagement reports. Participated in planning and
			designing of engagement efforts.
Kimberly	Community Consulting	Public engagement	Responsible for providing direction on
Horndeski		consultant	appropriate public engagement efforts, as well
			conducting stakeholder interviews and creation of
			interview themes report.
Anne	Carroll, Franck, and	Public engagement	Responsible for providing direction on
Carroll	Associates	consultant	appropriate public engagement efforts, such as
			conducting stakeholder mapping workshop,
			creating engagement objectives, and engagement
			plan.

The engagement methods and processes included various participatory decision-making practices, such as ToP®, and the International Association for Public Participation (IAP2) processes for a holistic approach to development of the Lake Alice Watershed Management Plan (LAWMP). This ensured that stakeholders were given opportunities to provide input and feedback on various components of the LAWMP. The role of the professional ET was to:

- Design and facilitate steering committee meetings and larger stakeholder engagements,
- Identify, interview, research and analyze stakeholders,
- Create and analyze surveys to collect input and feedback on the vision, recommendations, and final WMP,
- Prepare meeting and engagement follow-up documentation, and
- Prepare a final facilitation report.

## **Engagement Plan**

## Overview

The engagement plan provided a comprehensive view of project activities and engagement activities. The engagement plan was developed with the PT, SC, and the Engagement Planning Task Force (EPTF). The plan outlined the strategies and actions designed to involve key stakeholders, foster participation, and build relationships. It served as a roadmap for the engagement tasks, processes and timing, and deliverables. The engagement plan outlined the engagement activities, core values, code of ethics, objectives, and the goal and promise to the participants and public. The engagement plan used the International Association for Public Participation's (IAP2) three pillars of public participation to guide the LAWMP engagement efforts. Those three pillars included the IAP2 core values, IAP2 code of ethics, and the IAP2 spectrum of participation.

## **Engagement Planning Task Force**

The EPTF included three members from the SC, PT, and CT. The members' names, affiliations, and role in the project are listed below.

## **EPTF Members**

Name	Affiliation	LAWMP Role
Lilian Crawford	Student: Landscape Architecture	SC
John Guerra	Associate Director: Env Health and Safety - Occupational Safety & Risk Management	SC
Jeanna Mastrodicasa	Senior Assoc VP: Ag and Natural Resources	SC
Kaylee August	Sustainable Program Coordinator: Office of Sustainability	PT
Linda Dixon	Director of Planning: Planning, Design, and Construction	PT: Project Manager
Chuck Kammin	Director Electrical Distribution: Facility Services	PT
Scott Knight	Wetland Solutions, Inc.	CT: Project Manager
Jess Stempien	Rooted in Process	ET
Anne Carroll	Carroll, Franck, and Associates	ET

The EPTF participants volunteered at the first SC meeting in July. We held two virtual meetings facilitated by the ET to co-create the engagement plan based on stakeholder's needs and the activities of the project. The PT and SC provided input to the core values and objectives for the EPTF to consider as they built the engagement plan.

## **Engagement Core Values**

The engagement core values were adapted from the IAP2 core values and adopted by the PT and SC to define the expectations and aspirations of the public participation process as shown below.

The community engagement<sup>1</sup>...

- Is based on the belief that those who are affected by a decision have a right to be involved in the decision-making process.
- Includes the promise that the stakeholder contributions will guide the decision.
- Promotes sustainable decisions by recognizing and communicating the needs and interests of all participants, including decision makers.
- Seeks out and facilitates the involvement of those potentially affected by or interested in a decision.
- Seeks input from participants in designing how they participate.
- Provides participants with the information they need to participate in this project in a meaningful way.
- Communicates to participants how their input affected the decision.

The engagement core values of the project provided a guide for the development of engagement efforts.

## **Engagement Code of Ethics**

The engagement code of ethics was adapted from the IAP2 code of ethics and adopted by the PT and SC to use as a set of principles that guided the actions of the ET and enhanced the integrity of the public participation process. This ensured that engagements were accessible, information was transparent, and trust was built. The adapted and adopted code of ethics are shown below.

The code of ethics<sup>2</sup> for this project included:

- 1. **Purpose.** We support public participation as a process to make better decisions that incorporate the interests and concerns of all affected stakeholders and meet the needs of the decision-making body.
- 2. **Role of Practitioner**. We will enhance the public's participation in the decision-making process and assist decision-makers in being responsive to the public's concerns and suggestions.
- 3. **Trust**. We will undertake and encourage actions that build trust and credibility for the process among all the participants.
- 4. **Defining the Public's Role**. We will carefully consider and accurately portray the public's role in the decision-making process.
- 5. **Openness**. We will encourage the disclosure of all information relevant to the public's understanding and evaluation of a decision.
- 6. **Access to the Process**. We will ensure that stakeholders have fair and equal [equitable] access to the public participation process and the opportunity to influence decisions.
- 7. **Respect for Communities**. We will avoid strategies that risk polarizing community interests or that appear to "divide and conquer."

<sup>&</sup>lt;sup>1</sup> Adapted from the International Association for Public Participation Federation (IAP2), <a href="www.iap2.org">www.iap2.org</a>

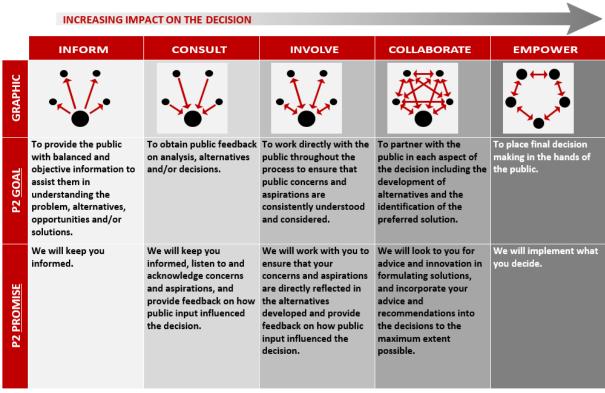
<sup>&</sup>lt;sup>2</sup> Adapted from the International Association of Public Participation Federation (IAP2), www.iap2.org

- 8. **Advocacy.** We will advocate for the public participation process and will not advocate for interest, party, or project outcome.
- 9. **Commitments**. We ensure that all commitments made to the public, including those by the decision-maker, are made in good faith.
- 10. **Support of the Practice**. We will mentor new practitioners in the field and educate decision-makers and the public about the value and use of public participation.

## **Engagement Goal and Promise**

The engagement goal and promise to the participants and public was based on the IAP2's Spectrum of Public Participation, as shown below.

## IAP2's Spectrum of Public Participation<sup>3</sup>



 $\hbox{@ IAP2 International,} \, \underline{www.iap2.org}. \, \hbox{All rights reserved}.$ 

The ET recommended to the PT that this project's goal and promise to the public be at the "involve" level of participation with the promise to work with stakeholders to ensure that their concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision. The goal of the "involve" level is to work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered. The level of involvement was adopted by the PT and used as a guide with the EPTF to build an appropriate engagement plan.

<sup>&</sup>lt;sup>3</sup> IAP2 International Spectrum of Public Participation, www.iap2.org

## **Engagement Objectives**

The engagement objectives were drafted by the ET and CT based on project needs. Feedback was received from the PT and SC members. The feedback was incorporated by the EPTF and adopted by the PT. These objectives, as outlined below, were utilized to provide focus to the engagement efforts of the project.

Our overarching engagement goals were to engage key community stakeholders by:

- Sharing information,
- Collecting input and feedback, and
- Educating and coordinating.

Throughout the project we shared information by:

- 1. Providing participants with understandable and relevant technical information, definitions, and timelines.
- 2. Providing participants with background information related to the lake and this project, including University policy and related regulatory information.
- 3. Clearly conveying the University's commitment to jointly developing a feasible plan and implementation timeline and advancing improvements.

Throughout the project we collected input and feedback by:

- 1. Gathering meaningful input and insights on critical priorities that are central to the project.
- 2. Gathering substantive feedback on key alternatives and options.

Throughout the project we educated and coordinated by:

- 1. Building community understanding of the issues and needs, and support for short- and long-term watershed opportunities and solutions.
- 2. Creating opportunities for participants to listen to and learn from each other.
- 3. Coordinating project engagement and learning efforts with related UF and community projects.

## **Engagement Efforts**

The engagement efforts included engagement preparation activities, collecting input on the Watershed Vision through public engagement and creation of a Vision Task Force, assisting the PT with data collection through Technical Exchange Workshops, collecting feedback on ranking criteria and funding mechanisms from the PT and SC, and collecting feedback on recommendations. The engagement efforts occurred from July of 2023 through April of 2024.

Below is a table summarizing the engagement efforts throughout the project. The original task evolved based on the needs of the project.

## **Engagement Efforts Summary Table**

Completed Facilitated	Completed Reports and	Completed Surveys and	Other meetings
Engagements	Documentation	Interviews	
<ul> <li>Virtual stakeholder mapping workshop</li> <li>5 SC meetings with two in-person and three virtual</li> <li>Two Engagement Planning Task Force (EPTF) virtual meetings</li> <li>Three technical exchange virtual workshops (TEWs)</li> <li>Three public vision input workshops with two virtual and one inperson</li> <li>Two Vision Task Force (VTF) virtual meetings</li> <li>One in-person feedback workshop with UF Administration (implementers) and PT</li> <li>One in-person public informational workshop</li> <li>One virtual public informational workshop</li> </ul>	<ul> <li>Interview report and key findings summary</li> <li>Five SC meeting summaries</li> <li>Engagement Plan</li> <li>Vision input compilation</li> <li>Vision Task Force Summary</li> <li>Public informational workshop summary</li> <li>Final facilitation report</li> </ul>	<ul> <li>31 preparatory interviews of PT and SC members</li> <li>Conservation Area Land Management Plan facilitator interviews</li> <li>Vision survey and analysis</li> <li>Public informational workshops feedback survey</li> </ul>	<ul> <li>Engagement planning meetings</li> <li>PT meetings</li> <li>Website design consultation</li> </ul>

## **Engagement Preparation**

To prepare for the engagement efforts the ET conducted preparatory interviews of the SC and PT members, facilitated a stakeholder mapping workshop, and created a master contact list of stakeholders.

## **Preparatory Interviews**

## Overview

As an initial step in the development of the LAWMP, the engagement team conducted phone and virtual interviews with SC and PT members. All were invited to schedule an individual interview with the engagement team, but some were unable to participate due to scheduling conflicts. The interviews were conducted from May through June 2023.

- The SC included 29 members identified by the PT, from various University departments and County or City organizations; 25 of the members were interviewed. See list below.
- The PT includes seven members from UF administration; six of the seven UF administrators

were interviewed. See list below. Additionally, the PT includes the CT.

The aims for the interviews were to understand the:

- Context and background of Lake Alice
- Members' history with Lake Alice and the surrounding watershed
- Challenges, potential areas of conflict, and opportunities

The interview questions below were developed by the ET with feedback from the PT and CT. The ET asked each interviewee the same questions and captured their responses.

- 1. Tell me about your background with Lake Alice (or the University, or the WMP).
- 2. What is the significance of Lake Alice to you?
- 3. What is your relationship and interactions like with the members of the Steering Committee?
- 4. What do you see as your role/responsibilities in the Steering Committee or Project Team?
- 5. What decisions do you think you, and the Steering Committee, will be making?
- 6. What challenges do you see with the Steering Committee, Project Team, Lake Alice?
- 7. What opportunities do you see with the Steering Committee, Project Team, Lake Alice?
- 8. In a perfect world, how do see the Steering Committee functioning?
- 9. What makes a successful collaboration for you? What makes collaboration fail for you?
- 10. When have you been involved with facilitation, and what was successful?
- 11. What question(s) do you wish we asked that we didn't ask?
- 12. Is there anyone not present in the Steering Committee or Project Team that should be?

The interview notes were synthesized into common topics and themes that reflect the perspectives of the interviewees during their interviews.

## **WMP** and Watershed Characteristics

Interviewees identified aspects of the WMP and Lake Alice in the following areas. Each area includes summarized themes from interviewee responses.

#### *Vision for the future*

- Demonstration site and model for appropriate stormwater management and stormwater for lakes
- Example of a multi-use and multipurpose environment
- Place to capture stormwater and wastewater and be a natural amenity
- Sentinel of how campus is dealing with environmental issues
- Basin Management Action Plan program as a tool for management

#### WMP characteristics

- Actionable, defendable, impactful, friendly
- Feasible, measurable; sustainable; usable; viable
- Fundable; economical, implementable, maintainable

## Technical characteristics

 Reflect stakeholder perspectives on the meaning, value, and importance of Lake Alice in the planning process, decisions, and actions

- Address regulations, expectations, and perspectives around managing the lake as an engineered system versus a natural system vs. conservation; balance science, operations, regulatory, and use/user issues and perspectives
- Focus on root causes and viable, longterm solutions
- Use UF and community expertise to explore innovative ideas, gain knowledge and solutions, understand stakeholder input and feedback on recommendations, and make more informed management decisions
- Develop a sustainable plan for all parties involved; determine how best to use resources; make sure the plan is meaningful, useful, realistic, and can be implemented
- Be good stewards of the resources on campus; ensure the protection and viability of Lake Alice; integrate WMP with the campus master plan along with more ecological and environmentally responsible development design and construction processes
- Address user interactions with the water, flora, and fauna

#### Feelings, Aesthetics

- "Heart of the campus"
- Iconic to UF; icon for current and former students (place/space making)
- Current/past people's land use
- Natural connector for the University
- First campus master planning process surveyed people's favorite places on campus and Lake Alice was ranked number one
- A campus strategic plan identified Lake Alice as a significant and meaningful

## place to a lot of people within and outside of the University campus

#### Habitat, Natural Feature, Recreation

- Habitat for migratory birds
- Last place for conservation on campus
- Natural area for birdwatching/wildlife watching
- Natural area for picnics/reflecting
- Natural area for walking/running
- Not natural
- Provides habitat for bats/alligators/birds
- Representation of Florida's wildlife
- Scenic area (place to commune with nature)

## Teaching, Research

- Field trips
- Research studies and projects/teach outside
- University and outside organization courses
- Use garden area and trails for education
- Water quality monitoring, fish sampling
- Wildlife surveys

#### Water Management

- Campus stormwater pond
- Class III waterbody
- Functions well for water management
- Hyper eutrophic
- Impaired waterbody
- Manages flooding issues/flood control
- State waterbody
- Treatment of stormwater on and off campus
- Water discharge areas

#### Funding, management

• Align WMP with master plan for campus expansion

- Address changes in UF funding priorities over time
- Missing frameworks, expertise: No established handbook on working with entities in which stormwater and structures cross boundaries; no campus urban forester, no permitting expert within Facilities/Operations, no point person for Lake Alice issues

## Challenges

Interviewees identified the following challenges to be addressed through the WMP and their work together.

## Cautions, issues, priorities

- No pre-treatment for stormwater runoff
- Dredging the lake vs. other management actions
- Managing existing invasives
- Protecting the lake from transmission lines, pipelines, roadways, etc.

## History

Interviewees identified shared perspectives on historical knowledge and anecdotes. This content must be fact-checked and edited before being included in public communications

- In the mid-1950s there was a plan to put a 4-lane, limited highway around Lake Alice which generated letters of objection to the Governor and DOT
- Some student organizations were created in the stop-the-highway era, and a prominent law professor who led the charge is now on the Faculty Senate Committee
- In the 1960s there was a plan to drain the lake because of flooding. Marjorie Carr (recognized environmentalist) fought against this plan and instead was able to get Lake Alice designated as a wildlife sanctuary
- In the 1970s, an area in the designated wildlife sanctuary area was trimmed and cleaned, resulting in it permanently losing its sanctuary status
- Students in the 1980s and 1990s wanted a beach but biologists were against it because of the sanctuary collapse
- In the early-to-mid 1990s, a plan to put a raised bridge and bike corridor across the lake was met with opposition
- In the mid-1990s, Friends of Lake Alice opposed a 1,300-unit housing complex where the bat houses and gardens are; the housing complex changed locations in recognition of Lake Alice's natural biological value
- Multiple past projects to address stormwater vs. a cohesive watershed management plan

## SC and PT Engagement

The interviewees identified topics around how they want to be engaged and to work together throughout this project.

Engagement, education, process

- Understand the meaning, value, and importance of Lake Alice to all stakeholders, and ensure that is included in the planning process, decisions, and actions
- Provide clear information to all participants on science, operations, regulatory, and uses issues
- Actively involve students, faculty, staff, and other key stakeholders
- Educate and engage stakeholders around human and wildlife interactions; educate on how to deal with aquatic systems in urban environments
- Engage the student population in management of invasives and habitat management
- Develop an educational case study; increase access for research; showcase actual projects and be a demonstration area to other communities

#### Commitments, norms, decision making

- Be flexible and open minded
- Engage thoughtfully
- Share knowledge and expertise
- Respect different ideas and perspectives; build shared understandings
- Listen to each other
- Be prepared, organized, and participatory
- Be open and transparent in communications, activities, and decisions; support open and direct communications between and among all participants / groups / entities
- Build and strengthen relationships, collaborations, connections
- Build trust
- Share/discuss meeting plans and results

- with those they report to or represent
- Work toward understanding, balance, and consensus
- Do something together that we will all be proud of

#### **Participation**

- Create and support processes that support a range of perspectives, knowledge, and expertise
- Provide time and processes to build shared understanding and consensus
- Support PT and SC to monitor and evaluate their own work together, and make necessary refinements
- Recognize everyone's time constraints and work hard on equitable participation and contributions

## Support from CT and ET

- Provide background information
- Charge and desired outcomes
- Roles, responsibilities, commitments, and impacts of different groups (PT, SC, community, UF administration)
- Lake Alice and project background and history
- Resources to implement the final plan/recommendations
- Jointly plan sessions; be organized; use people's time wisely and efficiently
- Provide processes and structures to address key issues, recognize expertise, respect and value different perspectives and make substantive progress
- Organize meetings / activities to manage the balance between theory and practice
- Use a range of processes and methods tailored to purpose and objectives
- Help build shared vocabulary and

- understandings
- Provide prompt, clear, and accessible documentation, action steps, responsibilities, etc.
- Actively listen; respect different perspectives and expertise; be empathetic and sympathetic; be energetic and open

## **Expectations**

PT members expect the Office of Sustainability to help with communications and talking points for the SC, facilitated discussions and events, stakeholder marketing and communications (including project launch), and engaging stakeholders after events.

PT and SC members expect PT members to:

- Build relationships and actively listen at SC meetings
- Be the decision makers, ensuring the process considered different perspectives and the decisions are feasible and sustainable
- Serve as resources to help people understand challenges, opportunities, and constraints to planning, implementation, and maintenance
- Support implementation as much as possible

## Resources and Stakeholder Engagement

#### PT and SC expertise

- Activism on Lake Alice issues such as proposed high-rise buildings and a highway
- Aquatic ecology
- Best management practices on agricultural land and in urban development
- Biochemistry
- Biology
- Clean Water Campaign
- Committee experience with similar issue for Illinois university
- Committee experience with Florida Department of Environmental Protection's Greenways and Trails Committee
- Committee experience with other campus committees

- Committee liaison with Lakes
   Vegetation and Landscaping Committee
- Ecotourism
- Environmental history
- Effects of urbanization on water quality
- Facilitation and public engagement
- Geology
- History
- Landscape Architecture
- Limnology
- Master's studies around Lake Alice and its watershed
- MS4 permitting oversite
- Nutrient cycling
- Stormwater outreach with Gainesville community
- Watershed
- Wildlife

#### Documents to use

Campus fertilizer study

- Landscape Architecture students' 2021 Lake Alice design board and report
- Larry Kohrnak thesis
- Movement of wildlife through watershed (ongoing thesis project)
- Stormwater Ecological Enhancement Project (SEEP)
- Studies on floating wetlands
- Water quality sampling from creeks that flow into Lake Alice
- Wildlife surveys
- Work of Ondine Wells, master's student
- Work of John Linhoss, master's student

#### Stakeholders to engage

Interviewees identified the following University groups and people as potentially having some level of involvement in the decision-making process and implementation of the WMP:

#### Potential stakeholders table

Name	Description
	Nature-based recreation staff member
Basil lannone	Assistant Professor in Forest Resources and Conservation
Dan Canfield	Professor of Limnology, applied research on managing aquatic ecosystems
David Kaplan	Faculty Engineering and Director of Wetlands Center
Environmental Law Professor	Tom Akerson may know who should be involved
Fred Strozier	Stormwater Inspector
IFAS Representative	Jeanna Mastrodicasa would know who should be involved
Jason Ferrell	Center for Aquatic and Invasive Plants
Joe Little	Law Professor
Lindsey Reisinger	UF Aquatic Ecologist and Species Ecologist
Matthew Doty	Hazardous Materials Program Manager
Rafael Munoz-Carpena	Professor Hydrology and Water Quality Program
Stephen Enloe	Center for Aquatic and Invasive Plants
Tina Gurucharri	Landscape Architecture
UF Police Department	To address safety concerns.
Wendy Graham	Water Institute

#### University groups to engage

- Facilities Services
- Faculty Senate
- Infrastructure Council
- Faculty Senate Joint Committee
- Senate Steering Committee
- Campus Planning Committees
- Lakes, Vegetation and Landscaping Committee
- Land Use and Facilities Planning Committee
- Parking and Transportation Committee
- Construction Project Planning and Approval Executive Committee

- Planning, Design and Construction
- Construction Management
- Office of Sustainability
- Utilities Engineering

#### Potential community stakeholders table

Name	Description
Chuck Hogan	Previous employee, Clean Water Campaign and NPDES experience
Claire Lewis	Florida Friendly Landscaping
Cynthia Barnett	Journalist and teacher – wrote a bunch of books on Florida and water. Teaches a class on government journalism.
Doug Soltis	Distinguished Professor at FL Museum Laboratory of Molecular Systematics and Evolutionary Genetics; opposed deforestation of area across from museum
Frank Chapman	Retired Fisheries Professor; with wife Gail, involved in sinkhole issue near Rietz Union
Kate Hellgren	Science-based environmentalist – good community representative (spouse of Eric Hellgren, Chair of Wildlife Ecology and Conservation Dept)
Marianne Vernetson	Graham Center for Public Service (she would know others as well)
NGOs, volunteer groups	Ex: All Hands Gainesville or All Hands Alachua County

## Stakeholder Mapping Workshop

#### Overview

The purpose of this workshop was for participants to identify and analyze the stakeholders who are most relevant to the LAWMP process. The participants for this workshop were identified by the PT. The workshop was held via Zoom using Google Slides to collaborate. The results were critical to a robust and transparent engagement plan that guided our work with key community stakeholders. The workshop used a highly participatory stakeholder "mapping" process that yielded clear and useful results. Everyone was actively involved throughout the workshop contributing ideas, insights, and perspectives to reach consensus on key stakeholders. For the purposes of this virtual workshop, we used this definition of a stakeholder: A stakeholder is an individual or group that can make a claim on the project's attention, resources, or output, or is affected by our work or activities.

In this workshop we differentiated between expert technical resources and community stakeholders. This was to help us identify the technical university and community experts to engage in a series of technical exchange workshops (TEW). We also identified non-technical university and community stakeholders who had ideas, perspectives, opinions, and thoughts about Lake Alice and the WMP.

The key workshop question answered was, who are the individuals, groups, and organizations that have a stake in, or power over, the future of the Lake Alice watershed? Through the

collaborative and participatory stakeholder mapping workshop the participants were able to identify stakeholders in the following categories:

- Users of Lake Alice and the watershed (trails, greenspace, viewing spaces, etc.)
- Students and faculty with classes, research, and similar at the lake or within the watershed
- Active community members involved in Lake Alice or watershed issues
- Environmentally focused student groups and organizations
- Housing residents and businesses that abut Lake Alice or are nearby
- Key UF communities and groups

Below is the specific list of key stakeholders identified at the workshop.

## Key Stakeholders Table

Users
Baby Gator- Staff & Parents
Outdoor users (Amanda)
People who have events at the Baughman Center
People who tailgate near LA
Photographers
Regular, active visitors to Lake - Bat House, Ficke Gardens, University Gardens and lake shore
Students with disabilities who want to access LA - Disability Resource Center
Students and faculty with classes, research, and similar at LA/watershed
Faculty teaching, research at Lake Alice (sciences, DCP)
Leaders of nearby acad units that interact w/LA; Unit Leaders: Dr. Gunter/Dr. Kopsell/Dr. Loria/Dr. Triplett
Students in classes, research at LA
Active community members
Alice's Friends (Christine Housel)
Doug Soltis - FLMNH
Erika Henderson, Alice's Friends, UF staff
Golfview Neighborhood Assn
Howard and Lisa Jelks, environmentalists, neighbors
Jim and Sibet Grantham, neighbors
John Moran, environmentalist, photographer
Margaret Tolbert, artist, environmentalist, neighbor
Rod McGalliard, neighbor
Environmentally focused student groups and organizations
Ethnobotany Garden group
Forestry Graduate Student Organization
GREBE Audubon Campus Chapter

Greek Life Leadership

Green Greeks Florida - Registered Student Organization
OAC - Unregistered Student Club
OUTdoors
ROTC members doing drills, etc. at LA
Society of Photography for Wildlife Conservation
Student Government - Gators Going Green
UF Greek Community
UF Students for New Urbanism
UF UnLitter
UF Wetlands Club
UF Wildlife Society
Housing residents and businesses that abut LA or are nearby
AGR - Fraternity
Baughman Ctr leadership
Field & Fork Garden - Students & Faculty (Anna Prizzia)
Fraternity houses near Lake Alice or draining into Lake Alice
Fraternity Residents
Fraternity Row - Adjacent to Fraternity Wetlands
Sorority Row residents - area drains to LA
Student residents near LA (Cory Village, etc.)
Key UF committees and groups
CALM Plan Steering Committee
Infrastructure Council
Lakes, Vegetation & Landscaping Committee
Project Team
Steering Committee
Student Senate

## **Technical Exchange Workshops (TEW)**

## Overview

UF Faculty Senate

The TEWs were part of the project's data collection in which UF faculty, staff, and community experts were invited to one of three virtual workshops from late August to mid-September 2023. An online survey was also provided for invitees to contribute technical information. The online survey had the same information and questions as the virtual workshops.

The purpose of these workshops was to provide an opportunity for technical experts to share information and/or projects related to Lake Alice, the watershed, or other similar systems in the topic areas of:

- water quantity and quality
- flora, fauna, and ecosystems
- user interactions
- other

This input ensured the WMP benefited from the full range of expertise available in the community. The technical exchanges provided a place for both project-specific and non-project specific content to be collected, conveyed, and heard. The information from the workshops was provided to the CT to use and evaluate as part of their data collection and inventory phase. The information provided will assist the CT in ensuring all relevant data are reviewed to develop the WMP.

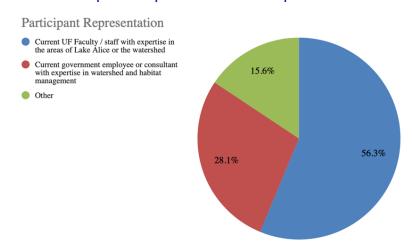
An overview of the project, major project elements, and timeline were provided to participants along with background information for each topic area. Below is a compilation of all contributions from participants including technical, non-technical, and input related to the vision. The vision input was not directly related to the TEWs and was added to the vision results from separate workshops.

## **Participants**

There were 32 TEW participants that registered for the workshops. Five additional people that did not register for a workshop submitted a survey. One person that registered and attended a workshop also participated in the survey. Only workshop registrants were asked about their representation.

Below is a graph showing the breakdown of the 32 TEW participants and their representation.

#### TEW Participant Representation Graph



If registrants answered "other", they were asked to describe their representation. Below is a list of submitted answers:

- Florida Friendly Landscaping Program
- Project Team

## Methodology

Participants answered the workshop question: What information/projects should the consultants know about to develop the Lake Alice WMP? Responses were provided on a Google Jamboard. Sessions were facilitated by members of the ET. Time was allocated for discussion and questions. Each workshop was an hour in length. The information below includes content provided to participants along with their detailed input. The detailed input is generally presented as written, edited for spelling and punctuation. Results include information about technical work and experts; those details are included below except student names have been removed. Participants also included their own names and contact information for technical follow-up; those were provided to the PT and CT but are not included in this compilation. There were 15 pieces of information provided by participants in the "other" topic areas. Some were duplicative of other pieces of information provided. All of these were related to a specific topic area and were moved to that corresponding topic area.

## Participant contributions

Below is a compilation of responses from participants in the second and third TEWs when asked: What is your connection with Lake Alice or the watershed?

Compilation of responses: Word Cloud

love visiting it Bat houses drive by the beautiful lake familiar with the issues enjoyment of it while being on campus Conservation Areas Land Mgmt Plan Center for Aquatic and Invasive Plants invasive plant issues afternoons by the lake outings with the family new girector of LAKEWAICH Survey/compile list of plants of the area new director of LAKEWATCH advised on campus invasive plant issues Use Lake Alice Conservation area for teaching and outreach provide education Florida-Friendly landscaping former director of Grounds recreational user monitored water quality taught classes on Lake Alice passive recreation walking along the lake

## Topic Area: Water quantity and quality (lake, wetlands, stormwater)

#### **Background info provided to participants**

- <u>Lake</u> is a Class III waterbody and designated uses: fish consumption, recreation, propagation and maintenance of a healthy, well-balanced population of fish and wildlife
- <u>Lake</u> is listed as impaired for phosphorus in the water column and mercury in fish tissue
- Watershed is listed as impaired for dissolved oxygen, phosphorus, chlorophyll-a, bacteria
- Sinkholes that drain lake, altered 1940s
- Earthen dam, 1948
- Wastewater discharge to lake 1926-47, 1964-94
- Two drainage wells into the Upper Floridan aquifer
- Lake serves as primary stormwater storage and treatment for Lake Alice Watershed
- Reduced storage from development
- Most of campus developed before stormwater rules
- Limited existing data for water quality, stage, bathymetry, etc.

#### Compilation of Participant Responses

- Alachua County has a countywide inundation model for future rainfall conditions which may be useful for future resiliency planning
- Alachua County has a stormwater treatment code that can provide a guide for pollutant load reduction in stormwater. We also have a design manual for LID/GSI
- Alachua County has water quality monitoring program that could serve as an example for this watershed
- Alice is unique in having very high total P values and low N/P ratio. Plus, relatively low chlorophyll a for the high nutrients
- Campus has some expansive clay soils to the NE portion of the watershed. Doing LIDs in this area doesn't always work
- Chuck Cichra and Dan Canfield may have data from their fisheries Limnology class
- CHW has over 30 years of experience on campus and would be happy to provide information about project specifics if needed

- Data at the state level on fertilizer bans show they have the ability to improve water quality over time
- During the last algae bloom facilities noted the amount of silt from construction projects was affecting the depth of the water- need better construction standards
- Erosion and sedimentation are causing huge expenses and reduced capacity
- Gainesville and Alachua County are working on a countywide report in response to the new FDEP regulatory requirement for OSTDS plans
- General understanding of how landscaping practices and projects around campus affect the watershed, e.g. fertilizers (paper published by Schmidt et al 2022)
- Grounds should have records of sedimentation removed from creeks on campus
- I also have data on the ineffectiveness of stormwater ponds at protecting wetlands. Dr. AJ Resinger has data on development on campus

- I am working on a project that tests the effectiveness of native plants in improving water quality in stormwater ponds
- Identify current and historical sources of pollution and make this a priority action item in the development guidelines. I have a method from a previous BMP research.
- I have data on invasive plants in stormwater ponds
- I took a class at Iowa State University which included urban water management
- Lakes Newnans, Orange, Lochloosa We have several publications on nutrients, sediments, etc. I have pdfs
- LAKEWATCH has water chemistry data (TN, TP, Chl a, color, cond) from Lake Alice. I'm not sure how far back it stretches, but I can find out. <a href="https://lakewatch.ifas">https://lakewatch.ifas</a>
- Larry Korhank thesis (I have chapters in pdf format)
- Marina Schwartz thesis (2019) I have pdf
- Mark Clark worked with someone with UF sustainability (or similar office) where they mapped out all of the LID opportunities on campus. Done in the early 2010s, part of the whole campus water quality monitoring program
- Master's Thesis focused on the effects of nutrient reduction on Largemouth Bass population in Lake Alice
- (Named removed) conducted an MS thesis using Lake Alice water chemistry/largemouth bass data

- On the east side of the stadium and the west side has discharging basin to the UA basin (Golf course)
- The 2015 Campus Development Agreement between UF, Gainesville & Alachua Co has level of service criteria and SMU fee guidelines that you should reference
- The City has redevelopment thresholds that require W quality & quantity at 4,000 sf and greater
- The County has done several projects in the Newnans Lake watershed looking at nutrient sources
- The tributary creeks have eroded into the Hawthorne Group A
- Water quality data set from 2003-2013
   Assessment associated with UF Campus
   Clean Water Campaign. Excel format.
   Already shared with Scott
- Water quality from Florida Lakewatch database
- Watershed delineation may need to be looked at in super detail to ensure what is discharging to LA. For instance, the UF ballpark has a full retention stormwater
- We had an undergraduate research project quantifying water quality and sediment metals from creeks draining into Lake A. (already shared data)
- We have been monitoring pesticides in Lake Alice over the past two years
- We have started working with LOCSS to monitor lake levels with volunteers. It's engaging and would work well on Lake Alice: <a href="https://www.locss.org/">https://www.locss.org/</a>
- We hope to get some info from a short sediment core taken on 22 August 2023.
   Sedimentation rate and heavy metals

## Links provided by participants

- Green stormwater infrastructure: https://gsi.floridadep.gov/
- Florida Lakewatch: https://lakewatch.ifas/

- Impacts of residential fertilizer ordinances on Florida lacustrine water quality: https://aslopubs.onlinelibrary.wiley.com/doi/10.1002/lol2.10279
- Lake observations by citizen scientists and satellites: <a href="https://www.locss.org/">https://www.locss.org/</a>
- Composition of N in urban residential stormwater runoff:
   <a href="https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0229715">https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0229715</a>
- Nutrients in urban stormwater runoff: https://link.springer.com/article/10.1007/s40726-018-0087-7

## Documents provided by participants (all documents were provided to the CT)

- Characterization of pesticides in urban waterbodies of Gainesville FL
- Living mulch and micro-irrigation
- Undergraduate thesis on nutrients and stormwater ponds by Walker

## Topic area: Flora, fauna, and ecosystem (vegetation, fish, reptiles)

#### Background info provided to participants

- Invasive and exotic vegetation cover significant portions of the lake and watershed
- Water hyacinth historically covered large portions of lake
- Dragline used to remove hyacinth in the 1960s
- Approximately 3/4 of Lake Alice is vegetated
- <u>Lake</u> is eutrophic with chlorophyll-a concentrations averaging 13 ug/L (rich in nutrients that support a dense plant population, the decomposition of which can kill animal life by depriving it of oxygen)
- Freshwater marsh, bottomland forest, mesic hammock, and upland hardwood forest are dominant natural communities
- Approximately 450,000-500,000 bats inhabit bat houses
- Wildlife on campus includes a variety of mammals, reptiles, amphibians, fishes, and birds

#### Participant contributions

- According to Forsburg and Ryding (1980), Lake Alice is not eutrophic, but mesotrophic
- AJ Reisinger may have water quality data collected during his water sampling
- Do they still use that big barge to scrape aquatic plants?
- Do we have a survey of habitat for wildlife (historically)? Has there been change over the years (i.e migrating species)? If not, we should be tracking those.
- Dr. Jay Ferrell from the UF/IFAS Center for Aquatic and Invasive Plants would be helpful

- FFL has resources with appropriate plants for stormwater ponds. Can forward resources. CALM plan notes the invasive management as a high priority
- Filamentous algae has increased over the last couple of years (private applicator hired and sprayed copper) used to have huge population of Tilapia - stocked 05
- Fish population data taken every year since 1988 - available in JMP
- Grass carp not existent anymore
- Grass carp permit was done by Chuck -FWC grass carp permit (for 1600) permit still active, 500 stocked

- Grounds traditionally has had a contract to manage the algae of the Lake
- I have ~35 years of fish data from Lake Alice - collected over ~12 weeks each spring -ID, total length, weights. I also have tagging data - 1990 - 2003 (all paper copies). 30 years worth of files on computer - marker period, water chemistry -Gretchen taking over and will have access to all the data. Water collected 2nd, 3rd week - Jan
- I have been working with students to generate lists of the flora for UF Natural Areas and have worked with the FM to develop BioGator, an online portal for this info
- I have worked with the office of sustainability on campus invasive plant management issues. There are many upland, wetland and aquatic plant problems to address
- Invasive plants require proactive approaches that lead to maintenance control. Eradication is out of the question for most species on lake Alice and the watershed
- It will take a large effort to remove invasives. McCarty Woods is an example
   it takes teams of volunteers and also interns/experts
- Kent Vliet used to do alligator surveys on the lake and told me it was a nesting site; may have some historic data; I don't know if FWRI conducts those now
- Lake Alice has a history of mercury issues. Mark Brenner and LAKEWATCH collected sediment cores this summer to assess temporal Hg levels. Data in progress
- Lindsey Reisinger led an undergrad course last year (maybe) looking at aquatic inverts in a few water bodies around campus. Lindsey's course - not sure if digitized - sampled creek thru

- University Gardens, the SEEP, and another temp ponding habitat near SEEP
- No current list of invasives, surveys are just a list of species and not indicating how widespread invasives are in the area - but others can say conservation areas are at tipping point
- Sensitive, native vegetation, including state threatened and endemic species, occur in this area, so those should be taken into account for any future modifications to natural areas
- There have been several fish kills at the lake. Most are probably cold-related, but have people studied those? Ruth Francis Floyd may know (UF Vet school and Fisheries)
- There is equipment used to harvest invasives that take over aquatic vegetation (may be a campus owned equipment)
- To my knowledge, no one has conducted long-term surveys of the aquatic vegetation in LA. In the past, there were none present due to the blue tilapia and grass carp
- UF doesn't invest or manage the bat houses at optimal level. EH&S is the department managing it but there is no budget for the bat houses from UF
- We can advise on BMPs for aquatic, wetland and upland tools, techniques, and overall strategies
- We have also made new collections of plants as part of our effort to inventory flora of lake alice, McCarty Woods, etc.
- We have compiled all records of plants, animals, and fungi in the natural areas available at biogator. Data was collected from museum and my naturalist/ebird all put into one portal - to look at any natural area to determine the biodiversity for that one area

#### Links provided by participants

- FLORIDA-FRIENDLY PLANTS FOR STORMWATER POND SHORELINES: https://edis.ifas.ufl.edu/publication/EP476
- A NEW DATABASE ON TRAIT-BASED SELECTION OF STORMWATER POND PLANTS: https://edis.ifas.ufl.edu/publication/FR416
- Biodiversity of campus: https://biogator.org/
- FWC Grass Carp Permitting: https://myfwc.com/wildlifehabitats/habitat/invasive-plants/grass-carp/

#### Documents provided by participants

• Guide to selection and installation of stormwater pond plants

## Topic area: User interactions (research, classes, access)

## **Background info provided to participants**

- Lake is used by faculty and students for teaching, learning, and research
- <u>Lake</u> edge near Baughman Center is used extensively for recreation
- UF policies prohibit fishing or hunting, swimming or wading, camping, boating, harassing wildlife or feeding alligators, damaging or collecting vegetation, or littering in all waterbodies on campus
- Allowable uses (some may require approval) include passive recreational use on the land, pets on land if leashed/under control, research and data collection, vegetation management, and stormwater maintenance
- Thousands of people visit the UF bat houses
- Tailgaters set up in the NW portion of the watershed before football games
- Many people visit various gardens
- Trail around portions of the lake is regularly used by UF and surrounding communities for walking and running
- Lawn near the lake provides an area for picnicking, meditation, etc.
- Many of the waterbodies and creeks elsewhere on campus are inaccessible for users

#### Participant contributions

- A recent UF regulation change precluded fishing and hunting on UF properties. It was aimed at Lake Alice
- Alachua County has done extensive outreach and education efforts. Stacie Greco at EPD can provide more information on this
- Anna Prizzia and the Field and Fork Farm would have some input, they teach classes nearby at the farm
- Are there opportunities for more/better interpretive signage? If people are

- mostly walking through might be good opp for passive edu
- Baby Gator kids often get walked over to Lake Alice
- Canfield & Cichra have decades of data on fish catches and water quality, and student reports
- Education and public outreach associated with NPDES Phase II permit. I implemented the program up through 2017. I do not know stats now

- Have a case study on metrics to measure for the therapeutic value and mental health benefits of recreation benefits
- I believe that some of the horticulture classes might use Lake Alice for Plant ID labs. Not sure who the contact for this would be any more, but would be the Horticulture Dept
- I had several students in my Quest2 water course talk about the importance of Lake Alice to their mental health on campus
- I use the Lake Alice Conservation area, as well as other natural areas across campus for teaching courses on botany
- I did a short survey of students in my class about their use and value of the Gardens near Lake Alice. From what I remember, they highly valued the area and visited it often
- I'm exploring some improvements in the Natural Area Teaching Lab/Entomology area. It's nearby but not necessarily within the watershed
- In a student project in my class we developed a green corridor trail that linked about 12 different green spaces on campus to Lake Alice. Will look to see if I have a copy of the student project
- In a survey that was done for the new UF Master Landscape Plan a few years ago many students noted that Lake Alice was their primary place to be in nature and de-stress
- Look for information on Lake Wauburg (managed by Student Rec - may have usage data)
- Numerous UF classes are taught at Lake Alice, even if it is just for one field trip
- Should we also know how many people outside UF visit the Lake regularly?
- Sororities and fraternities have houses impacted by the Lake Alice Watershed.

- These are privately owned houses on the UF campus
- Student thesis: Place Attachment as an integrating Concept: Social Science Considerations in Watershed Management, John Emerson Linhoss 2008
- Tens of thousands of visitors come to campus for football games. These are great opportunities to educate
- The Conservation Area Land Management (CALM) plans have quite a bit of information available on both Lake Alice and context
- The FFL™ Program has been working with DEP to develop a GSI website with Florida Specific resources. https://gsi.floridadep.gov/
- The FFL™ is developing a pond maintenance certification and we would like to use Lake Alice as a demonstration site to teach folks from around the state
- The program is also developing a GSI maintenance training to help ensure the GSI systems continue to function after they are installed. I will send the manual
- The Trails Master Plan included quite a bit of research/stakeholder engagement on how the perimeter of the Lake could be utilized
- There is a list that has been shared with LVL of natural areas (don't have a comprehensive list for all natural areas but is a pretty large list)
- There is a lot of research of recreation benefits (would like to help with that)
- There is a nearby therapeutic garden at Wilmot Gardens, and access to Lake Alice trails could be beneficial
- UF/IFAS has many buildings and employees at the southwest edge of Lake Alice

- We and others use McCarty Woods quite a bit for teaching and also research
- What new recreation opportunities (events, infrastructure, etc.) would highlight the value of the Lake Alice area
- to faculty, staff, and students? A recreation plan.
- Will address aging ponds in HOA communities - pilot tested in SF and LA will be a great place to test (online training and in person field day)

#### Courses connected to Lake Alice or the watershed

Below is a list of courses that use Lake Alice or the watershed. Participants who provided the information and gave their name are noted in parenthesis.

- BOT2710, 5725, Plant taxonomy (undergrad/grad) (Lucas Majure)
- Canfield & Cichra taught FAS 6932 and FAS 4305C using Lake Alice as their field site. (Gretchen Lescord)
- FAS4305C (Introduction to Fishery Science) and FAS6932 (Fish and Limnology) are taught each spring on Lake Alice. (Chuck Cichra)
- I'm teaching FAS 6932 & 4305C this winter. I will still use Lake Alice as our field site, I'm reducing the amount of data collected and broadening course scope (*Gretchen Lescord*)
- In 2022, I guest lectured for Christine Angelini's course, Env. Planning/Design (EES5307/4932) and we met at Lake Alice to talk about stormwater mgmt (AJ Reisinger)
- Invertebrate Field Biology (ENY3163/ENY5164)
- Jean-Claude Bonzongo (Dept. of Environmental Engineering) teaches an environmental analysis class that has included sampling Lake Alice. (Matt Burke)
- Lindsey Reisinger led an undergrad course last year (maybe) looking at aquatic inverts in a few water bodies around campus. (AJ Reisinger)
- Local Flora (BOT3151C) (Christine Davi)
- Natural Resource Sampling is taught each fall on Lake Alice (Chuck Cichra)
- Spider Biology (ENY4905/ZOO 4926) (Akito Kawahara)
- Research in Insect Biodiversity (BSC2930/ENY4905) (Akito Kawahara)
- UF CPET Pre College-Scholars program is a summer program that you might want to contact for use of LA. I have worked with them in the past. (Mark Clark)

## Participant provided course listing table

Course Name	Instructor Name	Dept
BOT2710, Practical Plant Taxonomy	Lucas Majure/ Doug Soltis / Pam Soltis	Biology
BOT5725, Vascular Plant Taxonomy	Lucas Majure/ Doug Soltis / Pam Soltis	Biology
BOT6905, Entering Research in Biology	Lucas Majure	Biology
BOT Independent Studies	Lucas Majure	Biology
FOR4090C, Urban Forestry	David Fox	SFRC
FOR4664, Sustainable Ecotourism	Taylor Stein	SFRC
FOR3200C, Foundations in Natural Resources and Conservation	Tim Martin	SFRC
FOR3342C, Tree Biology	Tim Martin	SFRC
FOR6340, Physiology of Forest Trees	Tim Martin	SFRC

Course Name	Instructor Name	Dept
FOR3153C, Forest Ecology	Stephanie Bohlman	SFRC
BOT2010, Introductory Botany	Jack Putz	Biology
PCB3601, Plant Ecology	Jack Putz	Biology
BOT5695, Ecosystems of Florida	Jack Putz	Biology
FNR3131C, Dendrology	Michael Andreu/ Jason Smith	SFRC
FOR3004, Forest Conservation and People	Michael Andreu	SFRC
FOR4624 C, Forest Health Management	Jiri Hulcr/Jason Smith	SFRC
FOR4934, Take a Hike	Jason Smith	SFRC
FNR3131C, Dendropathology	Jason Smith	SFRC
ORH3513C, Environmental Plant Identification and Use	Bart Schutzman	ENVHORT
HOS5117C, Horticultural Plant Morphology and Identification	Bart Schutzman	ENVHORT
ORH4932 & HOS6932, Advanced Plant Identification	Bart Schutzman	ENVHORT

## Non-technical Contributions from Participants

Some participants provided input on other aspects of the watershed management plan and vision. If the participant referenced any resources such as papers, sites, or links then the idea was left in the sections above and copied below. If it did not include technical information it was removed from the above lists and provided below.

- Algae blooms during summer (hot/humid/rainy) much larger than in the past (all of LA last year was covered in blooms)
- I am uncertain if facilities are really prepared to tackle the invasive plant issues. I am not sure it is within their current expertise.
- I believe most visitation data are anecdotal, which can be misleading. Most visitation is people walking by the lake and visiting the bat houses with little use of the natural area
- Invasives are becoming the dominant species in areas
- It is the go-to place for visitors to see gators
- Lake Alice is an important recreational area
- Over the past couple of summers, I have noticed what seems to be an increase in algal blooms across Lake Alice, presumably from run-off around UF.
- People need to realize that LA is a managed system not a 'natural' lake...
- The relationship with the Field and Fork Farm and Lake Alice are definitely intertwined.
- There is a huge problem with trash entering the system. There needs to be a way to capture this.
- There is a huge student recruitment opportunity by creating more interactive opportunities with the lake and the adjacent wetlands.
- Visitation numbers in the gardens area. How many people walk on the boardwalks? Pedestrian counters are a cheap and easy way to measure visitation

## **Vision Input**

Some participants provided input on other aspects of the watershed management plan and vision. If the participant referenced any resources such as papers, sites, or links then the idea was left in the sections above and copied below. If it did not include technical information it was removed from the above lists and provided below. All vision input contributions from the TEWs were added to the vision compilation and analysis for the WMP.

- A plan to consolidate/better define all the management roles (i.e. who is in charge of what)
- BMPs for fertilizer application on campus should not be separated from the watershed management plan
- Consider the educational opportunities for people who visit the lake (stormwater management, vegetation, wildlife, how people's behavior)
- Consider the lake's seasonal interests and therapeutic value to students.
- Create (and maintain) baseline data for water quality, current users (including proximity, and access for pedestrians and through the bus stops)
- Educating the public with signage
- Engage with Greek groups about conservation of Lake Alice considering how much they value it
- FFL™ would like to use Lake Alice as a demonstration site to teach folks from around the state.
- Highlight the unique and rare species, ecosystems, etc in the area. This can help add value to the area
- Identify current and historical sources of pollution and make this a priority action item in the development guidelines
- Identify future stakeholders from the education community (who will/and in what capacity) use the area for class activities. I will vote yes for using it for Biophilic Design
- It would be cool to install a real-time water quality and water level

- monitoring station in Lake Alice where data on the lake could be shared with the UF community
- Need data on the nutrient levels of the reclaimed water and a better understanding of the amount of nutrients that may get to Lake Alice through the use of reclaimed
- Need to strike a balance between recreational infrastructure and habitat quality (i.e. how much impervious surface is needed for walkways, piers, etc.)
- Nutrient load into Lake Alice, or concentration of nutrients in tributaries would be nice to have.
- Providing habitat and appropriate plant material to attract and provide food and homes for wildlife will pay huge impacts
- There are great opportunities to provide boardwalks around the lake providing recreation and educational opportunities
- Updating tree mitigation plans to have more protection during construction projects, more silt barriers etc.
- Watershed Ordinance for current/future development impacting LA Watershed.
   Look for planning codes that adopted rules around aquifer recharge zone
- Would be useful to get a sense of what the current plant/weed management plan is
- Understanding of how changes in vegetation and landscaping around the lake may affect the lake. Examples could

be tree removals, vegetation alterations for utility right of ways, removal of natural vegetation for camellias, etc.

## **Vision Input and Feedback**

## Overview

Community stakeholders were invited to one of three vision workshops from mid-September to early October of 2023. An online survey was also provided for anyone to contribute to with the same information and questions as in the virtual and in-person workshops. To encourage survey completion, yard signs directing people to the survey were placed around campus for multiple days twice between the end of September and early October. The survey was closed in mid-October.

The purpose of the vision input workshops was to gather input from community stakeholders on their vision for Lake Alice and the watershed three years and ten years out.

Participants were provided project overview information and background information on each of the following topic areas to assist:

- Lake and watershed: water, plants, animals, ecosystem
- User interactions, resources, and cultural heritage
- Lake and watershed management: construction, operation, maintenance, policies, administration

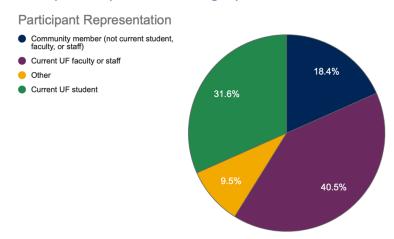
An overview of the workshop methodology, process and participants, and participant contributions are included below as well as background information that was provided to participants for each of the topic areas. Below is a compilation of all input received from inperson, virtual, and online surveys. The detailed input is generally presented as written, with minor edits for spelling and punctuation.

## **Participants**

Participants were required to register for the virtual workshops and requested to sign-in for the in-person workshop. There was a total of 73 registered participants for the virtual workshops and 26 participants that signed-in for the in-person workshop. For the online survey there were 57 individual responses provided. The online survey did not require respondents to provide their name, therefore, there is not a way to determine if input was duplicated between different formats. All participants, whether from the virtual or in-person workshops or from the online survey were asked to select the category that best represented them.

Below is a graph showing the breakdown of the participants and their representation.

## Participant representation graph



If participants answered "other", they were asked to describe their representation. Below is a list of submitted answers:

- Alumni Advisor for Alpha Gamma Rho
- Consultant
- Current faculty and former government employee
- Frequent visitor
- Government employee
- Graduate of UF and friend of the community
- Professor Emeritus
- Retired UF faculty

## Methodology

Participants answered the workshop question: *Imagine you are standing near Lake Alice. What do you see, hear, and feel? What is different from today? 3-years from now? 10-years from now?* 

For the two virtual sessions, each being an hour in length, participants provided their responses on a Google Jamboard, which allowed participants to simultaneously enter their ideas to the workshop question using virtual sticky notes. Participants anonymously typed their responses and placed them in either the 3-year or 10-year space. Virtual sessions were facilitated by members of the ET. The CT provided an overview of the project, timeline, major project elements, and background information for each of the topic areas. Time was dedicated to question and answer before participants individually brainstormed their response to the vision workshop question. Once participants were finished brainstorming, they were given the option to leave the meeting or stay and read other's ideas.

The in-person workshop was held at the UF Institute of Food and Agricultural Sciences' Straughn Professional Development Center from 4:30 PM to 7:00 PM on October 4, 2023. Participants were not required to register, but were requested to sign-in. The workshop was an

open format in which participants could visit at any time and stay as long as they wanted over the two-and-a-half-hour period.

During the in-person workshop, the PT and CT greeted guests and guided them to a mapping exercise to complete in which they were asked to place a dot(s) on the area they most liked to visit around the Lake or in the watershed. The PT and CT then guided participants to a space on the wall to read through a project overview and background information for each of the topic areas noted above. They were able to interact with participants and answer questions. Participants then answered the vision workshop question on sticky notes and placed them in either the 3 or 10-year columns. As part of the in-person workshop, participants could either draw or write their responses to the vision workshop questions.

## **Topic Area Background Information**

Background information was provided for each of the topic areas to participants for the workshops and within the online survey. At the virtual workshops, the CT provided a verbal overview of this information. At the in-person workshop, participants read this information silently. At each of the workshops, participants were given the opportunity for questions and answers before brainstorming.

#### Topic area: Lake and watershed: water, plants, animals, ecosystem



- Invasive and exotic plants exist in the watershed and cover 3/4 of the lake
- <u>Watershed</u> is impaired for dissolved oxygen, phosphorus, chlorophyll-a, bacteria
- <u>Lake</u> is impaired for phosphorus and mercury in fish tissue
- Lake level is stable (controlled by drainage wells)

- Plant communities in the natural areas are primarily freshwater marsh, bottomland forest, mesic hammock, and upland hardwood forest
- Approximately 450,000-500,000 bats inhabit bat houses
- There is a variety of wildlife on campus and in the natural areas





## Topic area: User interactions, resources, and cultural heritage



- 99% of faculty, staff, students, and Trustees agreed that protecting Lake Alice and other campus water features should be a management priority and identified Lake Alice as a personally significant place
- Cultural resources exist around the lake and natural areas from the indigenous Deptford Culture, Alachua Tradition People, and Potano Tribe



- Most of the lake is inaccessible for users, as are the creeks elsewhere on campus
- Teaching, learning, and research
- Recreation, walking, running, picnicking, meditation
- Baughman Center: Special events, milestones
- UF bat houses
- Tailgating







## Topic area: Lake and watershed management: construction, operation, maintenance, policies, administration

 Currently no single UF department or division is responsible for Lake Alice or watershed operation and







Permeable pavement by lake to reduce runoff.





- UF policies prohibit fishing or hunting, swimming or wading, camping, boating, harassing wildlife or feeding alligators, damaging or collecting vegetation, or littering in all water bodies on campus
- Allowable uses (some may require approval) include passive recreational use on the land, pets on land if leashed/under control, research and data collection, vegetation management, and stormwater maintenance

## Participant contributions: 3-year vision

What do you see, hear, and feel? What is different from today?

## 3-year Contribution word cloud



- A better functioning water runoff system/process, both above ground and subsurface water
- A boardwalk built on water
- A comprehensive plan for watershed restoration exists
- A comprehensive protect and preserve plan for Lake Alice
- A greater portion covered by water
- A plan for recreational use of the lake exists
- A more diverse fish population that is

- supported by a healthy benthic community
- A natural lake that has benefited from the removal of invasive exotic plants and campus-wide removal of invasive exotics
- A plan to consolidate/better define all the management roles (i.e. who is in charge of what)
- A third bat house
- A revitalized lake at Florida's flagship university
- A university position responsible for

- ensuring the maintenance of a healthy Lake Alice ecosystem
- Able to see more of the lake. Access to more areas away from the road
- Accessibility of Lake Alice trails and recreation areas is improved and such information is easily found by public
- Accommodations in place for those who are non-ambulatory or have other physical conditions that may prevent access

- Active nature tours and discussions introducing the flora and fauna
- Add a donation box(es)
- Additional sustainability signage discussing the importance of the Lake Alice watershed
- Algae
- All good as is
- All UF staff are educated about protocols, and come to understand their importance. Maintena nce becomes easy, routine, celebrated
- Allowance of green areas for deer and other wildlife
- An expanded Field and Fork garden area
- An improved view of the Lake from Museum Road
- Any development is only to enhance the ecosystem biodiversity, resilience, water quality
- Area is used for teaching
- Awesome farm growing fresh veggies, good signage for the area
- Barriers to keep tailgaters from parking on and possibly eroding the lake banks
- Bat houses remain

- Beneficial insects supported; biological controls used for pests/disease vectors (i.e. landscape immunity)
- Better access transportation
- Better bike lanes and a hiking path that circumnavigated the entire Lake Alice
- Better general understanding by UF community of the interconnected waterbodies on UF campus (all within Lake Alice Watershed)
- Better interpretive signage
- Better leveraging of biodiversity info in BioGator (https://biogator.org/) supported by UF Office of Sustainability
- Better maintenance of trails and boardwalks around Lake Alice
- Better maintenance of trails and boardwalk to make them more accessible and useable
- Better walking paths and lighting throughout campus conservation areas in Lake Alice Watershed
- Better water quality, less trash
- Biodiverse vegetation (trees, shrubs, grasses)

- Birds, alligators, fish, etc.
- Birds, gators and other wildlife abound
- BMPs for fertilizer application on campus should not be separated from the watershed
- Braille interpretations included on all signage
- Bring back the fireflies
- Build on a contemplative aspect of lake - a place of peace, quiet and reflection, possibly aided with a little signage re history and restoration management plan
- Calm, tree dense area
- Calm soothing space with clear water surface
- Camphor trees are removed and replaced with appropriate native species
- Campus bioblitz annual tradition, maybe a part of homecoming week?
   Might already be happening through the Florida Museum
- Campus plantings focus on native species and especially, native species that attract pollinators and feed wildlife
- Campus-wide landscaping that has

- eliminated water intensive plant material and replaced it with attractive xeriscapes
- Centralized teaching/learning resource, more like NATL
- Check out web cams explore.org to see how they can be used - the people watching are incredibly passionate
- Clean, clear water
- Clean up trash in areas like the Digital Design Wetlands!
- Clean water
- Cleaner surface water
- Clear invasive vegetation to open up views
- Clear stormwater/water quality permitting for the lake (conflicting permitting currently)
- Clearer water with fewer invasive plants
- Clearly defined, protected walking paths for pedestrians
- Connect efforts with those of Field and Fork to appreciate and steward natural ecosystems on campus
- Connect UF with Campus Nature Rx network and highlight Lake Alice and surrounding green

- space as essential resources
- Connect with campusnature.com for information on how universities make nature accessible and draw students into activities - include art, writing, music as part of the programming
- Conservation area should be maintained at the same rate as today (more land, not less)
- Consider how the existing golf course can be incorporated into UF's natural areas
- Consider the educational opportunities for people who visit the lake (stormwater management, vegetation, wildlife, people's behavior)
- Consider the lake's seasonal interests and therapeutic value to students
- Consider ways to increase and connect the various Lake Alice teaching-research efforts
- Conversion to a wetland park that provides water treatment, park access, and wildlife habitat similar to

- Sweetwater Wetland Park
- Cultivation of edible native flora + display for visitors to learn about these native plants. An extension of the student/co-op gardens
- Create (and maintain)
   baseline data for water
   quality, current users
   (including proximity,
   and access for
   pedestrians and
   through the bus stops)
- Create easily accessible/findable maps so people can see what is available
- Creating a model for a sustainable holistic clean water management system from precipitation, drainage and aquifer recharge
- Creeks and other wetlands managed to control invasives and enhance biodiversity
- Creek restoration and littoral edge restoration
- Damage to Lake Alice has been halted and most areas on campus that produce damaging runoff have been remediated
- Decision makers on campus recognize that Lake Alice being a "stormwater pond"

- doesn't mean it has to be treated like a Walmart parking lot swale
- Development of an exhibit at the Florida Museum on the history, biodiversity, cultural diversity, challenges of LA
- Development of trails and other amenities is limited to prevent further disruption of the ecosystem
- Designated recreational area(s) to protect/keep people at safe distances from vegetation such as exotic plants, wildlife, etc.
- Diesel buses and buses powered by methane gas are no longer in operation; buses and UF-affiliated vehicles are all electric. Any visitors to the lake don't have to breathe exhaust
- Different types of bird houses
- Diversity: bowfin, turtle, Submerged aquatic vegetation, plants
- Dredging the lake is considered, but moves forward only if it will do less harm than leaving toxic soils in place

- Easily accessible info (signs, app?) about how Lake Alice watershed has changed over past 150 years; leverage maps in UF digital libraries
- Educating the public with signage
- Education signs about the native and invasive plants and wildlife spotted at Lake Alice
- Education about migratory birds
- Educational components overviewing ecosystem services
- Educational material shared with the public on management approach
- Efforts to protect wildlife along Mowry (too many dead animals along the road now
- Either clear the man made islands so gators can use as intended or create new ones
- Elevated dock around lake, walking areas to prevent gator/turtle/human interaction
- Endorse celebrating Marjorie Carr
- Engage with Greek groups about conservation of Lake Alice considering how much they value it

- Engage with Greek life, other undergrad orgs to conduct e.g. creek cleanups
- Enhance and maintain the stormwater water quality and storm surge capabilities
- Enhanced biodiversity management brought back species that have disappeared
- Enhanced grounds keeping and overall maintenance
- Established management plan
- Everyone has a Lake Alice story - a leitmotif for many people
- Evidence of a collaborativecommunity approach to respecting, managing, and maintaining Lake Alice for ecological value, alongside the stormwater function (e.g. Sweetwater Park)
- Existing green spaces on campus are permanently protected
- Existing walks and activity along the lake are great - increase signage with QR codes to websites, podcasts to educate on what people are seeing so they can be better engaged

- Expanded boardwalk and trail network
- Feel the heat of the sun or the wind's breeze
- Fewer invasive species
- Fewer non-native, invasive plants. Better management of the natural areas
- FFL™ would like to use Lake Alice as a demonstration site to teach folks from around the state.
- Field and Fork continues to thrive
- Find ways to capture the Lake Alice identity and share it with the community
- Fishing is allowed and encouraged
- Fishing remains offlimits to the public/only for approved research purposes
- Flood waters aren't bringing trash and debris with floating garbage present on the surface after a strong rain event
- Flora changes from increased temperatures
- Focus not only on maintaining what habitat and biodiversity there is now, but also on restoring habitats lost from this watershed

- Focus on nutrient runoff into creeks from sports field
- For bats, native landscaping and gardens
- Framework is in place to record and monitor biodiversity
- Free of non-natural, chemical pesticides and herbicides that have been banned from use on campus
- Gators swimming around catching fish
- Get rid of Ardisia, (I've seen it mostly behind Lake Alice field)
- Get rid of invasive plants such as Ardisia
- Get rid of the invasive Arrows (Syngonium podophyllum, Colocasia esculenta, Xanthosoma sagittifolium)
- Greater research opportunities for UF students
- Green stormwater infrastructure/nature based solutions as the standard for new building projects
- Hear more birds in the morning
- Hear the birds chirping and the leaves in the wind
- Hear the chatter of people, the hum of cicadas, or the calls of birds

- High levels of sediment from construction
- Highlight the unique and rare species, ecosystems, etc in the area. This can help add value to the area
- Hoping that I see a healthy lake that provides a peaceful spot on an otherwise busy campus
- Hold concerts to bring more nature and art installations to campus to encourage people to "imagine" connections with nature
- Honor and recognition for Marjorie Carr for her role in establishing Lake Alice as a wildlife sanctuary in the 60's
- I can see a beautiful reflection on the water surface
- I can see fish and turtles through the waters, and see a great variety of waterbirds
- I could see an effort to remove organic mucks to restore a natural lake bottom capable of serving as habitat for aquatic macrophytes for lake health
- I hear birds but no cars or buses
- I feel the breeze and
- I feel relaxed, peaceful, and intrigued by the nature around me

- I see a variety of fish
- I see gators!
- I see green and other colors like yellow, orange. There is a lot of vegetation and beautiful scenery
- I should be able to see and feel the contrast from the urban area (i.e., biodiversity)
- Identify current and historical sources of pollution and make this a priority action item in the development guidelines
- Identify future stakeholders from the education community (who will/and in what capacity) use the area for class activities. I will vote yes for using it for Biophilic Design
- Implementation of improved regulations on fertilizer/pesticide use for surrounding areas to reduce runoff into watershed
- Improved air quality
- Improved mosquito control in swampy areas (like the Golfview "swamp.")
- Improved water quality
- Improved water quality
- Improved water quality as usage of internal combustion

- engine vehicles decreases and usage of fertilizer/herbicides/pe sticides/fungicides minimized
- In his State of the
  Campus address to
  faculty senate, Pres
  Sasse mentioned
  alumni identify Lake
  Alice as the most
  memorable location on
  campus Keep that
  importance to alumni
- Inappropriate behaviors are not allowed near Lake Alice (fireworks, loud concerts, parking)
- Inappropriate buildings

   on flood plains- have
   been removed,
   enhancing campus
   ability to prevent
   flooding
- Increase size and areas that can be used for leisure and lake viewing
- Increase programming on nature-based therapy offerings for students, faculty and staff
- Increased temperatures
- Increased visibility from as many sides as possible. When it is out of sight, it is out of mind
- Information at the big points that are part of the watershed (Lake

- Alice, Normal Hull).
  Places people wouldn't
  expect to be part of
  the watershed
- Information is available online and on-site to educate the public
- Informational signs about Lake Alice Biodiversity, with info to find out more online and how to contribute (eBird, iNaturalist, etc.)
- Informational signs about Lake Alice, drainage, usage, ecology, cleaning process, etc.
- Initial exotic/invasive vegetation eradication has been completed.
   The landscaping of natural areas is complete and designed to prevent streambank erosion and other disturbances that can reintroduce nondesirable species
- Intentional study area (Elevated platforms)
- Interpretive events for the general public
- Invasive plants
- Invasive plant removal team
- Invasive plants are mostly removed
- Invasive species are removed, with the help of UF students,

- staff, faculty, and the community
- Invasives are removed: animals and not just plants
- Invasives reduced
- Interpretive signage
- It would be cool to install a real-time water quality and water level monitoring station in Lake Alice where data on the lake could be shared with the UF community
- Keep human activity in the lake along the edges
- Keep trail free part of Lake trail free - setup web cams for people to watch wildlife activity
- Keep undeveloped land for wildlife and pollinator gardens
- Lake Alice "clean ups" or new projects proposed and executed by involved community members!
- Lake Alice is simultaneously a conservation area and a storm water drainage facility. Those seem to be inherently conflicting roles. How can we emphasize the former role while minimizing the latter?
- Lake Alice looks like a healthy vibrant ecosystem with

- healthy wildlife, no invasive species and greatly improved water quality
- Less algae
- Less algae bloom
- Less flooding into the Museum Rd and Village Dr intersection
- Less invasive plants
- Less turbid lake benefiting from upstream measures that have eliminated fertilizer runoff resulting in the end of manatee starvation and restoration of oxygen levels downstream
- Less vehicle traffic on Museum Road (perhaps this would encourage more wildlife to live at the lake
- LID standards and requirements
- Littoral vegetation
- Littoral zone planting to stabilize the banks of Lake Alice
- Lots of algae, traffic
- Low Impact Design at buildings and roads and paths upstream for stormwater attenuation during or right after rain events
- Maintain same degree of cover
- Maintain vegetation around the lake in a way that is better for

- wildlife not pruning of trees that are favored perching spots for wildlife - observe how wildlife uses the lake!
- Maintenance of trails near lake Alice (trash removal)
- Management of vegetation to enhance native species growth and enhance animal biodiversity
- Maps showing where drainage system is sending water
- Markers in/around ground, celebrate ground waters flowing to Lake Alice
- Methods for redirecting the large alligators that hang out on the Mowry Road sidewalks to safer areas (for themselves and humans)
- Migratory birds have returned to the trees around the lake
- Minimally intrusive boardwalk, at most, to increase access and appreciation, but not turning it into a theme park
- Modern boardwalk with lights + seating
- More access to educational opportunities
- More alligator bellows

- More animals, less algae
- More attention to water quality and lake health
- More areas for parking bikes!
- More art and engagement in arts, citizen science, birding and other naturebased therapy activities
- More biodiversity
- More bird life, wildlife
- More birds, perhaps some bird houses
- More bird species in, around the lake
- More boardwalks and trails
- More boardwalks more wetlands with pedestrian areas
- More cars and noise pollution
- More easily available info at lake about how it's important to teach and research on campus
- More educational signage about water flow and pollution around LA
- More migratory birds with restoration of Lake
- More native birds
- More native vegetation (aquatic and terrestrial)
- More nature paths and boardwalks to view

- additional, currently inaccessible areas of Lake Alice
- More obvious presence (signage, activity, etc.) of student groups helping to improve habitats in watershed
- More people gather at this natural magnet for the University
- More permeable parking areas, closer to the lake and marsh, including designated scooter parking
- More public access
- More seating and add restrooms to the site
- More seating areas
- More seating to enjoy the view
- More trails and guided hikes available for students
- More waterside walking access (as long as it does not harm the lake)
- More way for students to connect to nature
- More wildlife
- More wildlife and wildlife protection (habitat, nesting areas, etc)
- More wildlife cameras/data collection
- More wildlife in and around the lake
- Mowed grass surrounding the lake

- has been burned and is turned into second succession habitat
- Native plants, but also model plantings after Sweetwater's efforts to enhance water quality by using specific plants
- Natural looking stormwater conveyance to the lake using materials that are robust and require minimal maintenance
- Natural swimming pool
- Near-term
   management and
   aesthetic decisions
   that would increase
   visibility of the lake,
   and improve water
   quality based on
   shoreline management
   practices
- Need data on the nutrient levels of the reclaimed water and a better understanding of the amount of nutrients that may get to Lake Alice through the use of reclaimed
- Need to strike a balance between recreational infrastructure and habitat quality (i.e. how much impervious surface is needed for walkways, piers, etc.)
- Nesting platforms for birds
- New bat house

- New trash receptacles like they have in bear habitats that prevents raccoons from emptying trash cans we have now
- No boats on the lake
- No people fishing, because the law is being enforced
- Non-invasive boardwalk going around more of Lake Alice with information about the lake and the project and what people can do to maintain the watershed and keep it clean
- Notice people hanging their hammocks between trees
- Notice the balance of naturalistic processes and human activities
- Notice the number of runners, bikers, and walkers traversing around it
- Nutrient load is decreased and water is cleaner and tannic
- Nutrient load into Lake Alice, or concentration of nutrients in tributaries would be nice to have
- People are more respectful of wildlife
- People caring for the land, enjoying the space, using in

- appropriate ways to educate and thrive
- People enjoying the lake for its natural value, with only minimal development (boardwalk, kiosk, 1-2 covered shelters)
- Plant more trees along waterways to provide shade
- Plant native Arrows (Pontederia cordata, Sagittaria latifolia)
- Porta potties for the football tailgaters along the lake
- Presence of imagery of art in Harn Museum related to campus landscapes
- Protected by a standing, trained hazardous waste response and containment team
- Provide learning and research opportunities for UF students (add stormwater monitoring devices, make data available, etc.)
- Providing habitat and appropriate plant material to attract and provide food and homes for wildlife will pay huge impacts
- Public outreach materials about nature to guide visitors near parking areas and trails
   in all accessible areas

- Quit calling Lake Alice a stormwater pond, forever
- Recreation programming
- Rebuilding green natural space
- Reduced algae mats
- Reduction in invasive species, reduced algae bloom & poor water quality
- Reduction of sedimentation and runoff because of best management practices
- Restore lake waters and education locals/students/alums about increased health and biodiversity in the lake
- Revitalized lake benefiting from a year round campus-wide ban on the use of petrochemical fertilizers, replaced with plant source fertilizers
- Restoration based on use of native plants, historical records, etc.
- Same if not more conservation area to protect
- See better signage for trails/easy to follow trail map
- See more vegetation to strengthen banks of the lake to filter and add oxygen to water runoff

- See the bat houses
- Short courses on the watershed, available to current students and alumni/visitors on occasion
- Signage showcasing actual uses alongside large-scale statistics and graphs showing how the watershed helps both people and the environment for educational purposes
- Signage throughout watershed about current and past biodiversity, nonnative species, and how to report observations
- Signage to identify the aquifer paths
- Signs, podcasts, conferences, and opportunities for students to publish also have made UF a leader in the Campus Nature Rx network
- Still see the Lake's ecosystem teaming with life and activity, both ecological and urban
- Stronger enforcement of littering laws.
   There's trash along the University Garden Boardwalk, as well as graffiti
- Stronger enforcement of "no fishing" policy (people fish right

- beside the signs prohibiting this)
- Some hardscape is being converted to wetlands that helps filter the waters
- The algae has been eradicated
- The boardwalks are newer/better maintained
- The campus is used for plein air painting, because its natural beauty is compelling
- The campus sanctuary remains intact for its plants, animals, and people
- The islands are cleared so that alligators can sun in a protected space
- The islands that block views of the lake removed
- The Lake and watershed can be used by extension faculty and staff to educate others from around the state in best practices
- The same animal biodiversity
- The same stormwater treatment
- The same vegetative habitat
- The same vegetative habitat
- The same view
- The sidewalks use permeable material

- and have a designated bike lane on museum road
- The third bat house has been rebuilt
- The perimeter has been established and development kept at bay
- THE WATER IS CLEAN!:)
- THE WATER IS CLEAN
- The water quality and stormwater drainage are improved
- The watershed management plan is implemented. All administrators, and the BOT support it
- There are great opportunities to provide boardwalks around the lake providing recreation and educational opportunities
- There should be wildlife such as birds, I love bird watching
- Three years from now improving water quality should be a major outcome
- Thriving ecosystem to support area wildlife and provide important flood mitigation purposes
- Traffic has been restricted and there is less constant flow of traffic on the road

- across from the bat houses
- Trash cans and port-apotties appear for the tailgate Saturdays
- "Trash" receptacles are almost entirely replaced with compost collection and recycling. Amenities within watershed discourage use of single-use plastics
- Trees and other flora are planted to enhance resilience to extreme weather events, both around Lake A and across the watershed
- Trees, vegetation
- Trees have been planted by students and locals and there are projects for planting submerged aquatic vegetation underway
- Try to keep human impact and walkways in the undisturbed areas to a minimum to provide nesting spaces and protected areas for wildlife
- UF actively patrols and tickets fishing in lake/ taking of species
- UF and community members able to engage in quiet observation, reflection, meditation, and personal restoration in

- a safe, relaxing setting around the lake
- UF converts to a lowtraffic, walkable campus
- UF has established a Lake Alice Water management Board that monitors and controls (issues permits) for all development that affects Lake Alice
- UF joins the Gainesville Water Quality Partnership
- UF uses public nightly enjoyment of Bat houses to spur Lubee interest
- UF stops over fertilizing, which produces runoff into the lakes
- UF stops overwatering and causing pollution
- Understanding of how changes in vegetation and landscaping around the lake may affect the lake.
   Examples could be tree removals, vegetation alterations for utility right of ways, removal of natural vegetation for camellias, etc.
- Upstream treatment of storm water to eliminate silt from entering the lake
- Upstream water containment

- Updated signage about the flora and fauna along the lake
- Updating tree
   mitigation plans to
   have more protection
   during construction
   projects, more silt
   barriers etc.
- Upstream issues are being managed so that it reduces the need for direct action at the lake itself (nutrient loading, water pollution, sedimentation)
- Use lake as natural UF centerpiece to inspire others for multidisciplinary restoration volunteer activities to involve student life
- Use upstream containment for local reclaim watering
- Volunteer opportunities would be great to involve people in Lake's improvements
- Walk onto the gator overlook
- Walkable/bikeable path all the way around lake alice
- Water and pollutants coming from surrounding roads and lands are held upstream; the City and DOT do their part
- Water conversation

- Water quality is on way to recovery
- Water quality shows measurable improvement
- Watershed Ordinance for current/future development impacting LA Watershed. Look for planning codes that adopted rules around aquifer recharge zone
- We are here because of the water (UF moved to Gainesville for water source) celebrate Lake Alice!

- We stop removing alligators from the population, and address limiting/eliminating human-wildlife conflicts caused by bad human behavior
- Webcams established and observations of the wildlife are part of a vigorous and growing curriculum
- Webcams in areas that are currently inaccessible
- Wildlife abounds

- Wind in trees similar as today
- Would be useful to get a sense of what the current plant/weed management plan is
- Would find attractive a vista of native aquatic plants serving as habitat rather than nuisance monocultures
- Would love more benches and seating areas near the lake
- Would love to see more wildlife like birds

# Participant contributions: 10-year vision

What do you see, hear, and feel? What is different from today?

## 10-year contribution word cloud



- 3 year changes are maintained
- A healthy lake and peaceful and beautiful surrounds
- A nationally recognized bird sanctuary

- A natural gem that highlights the highest standard of stormwater management, using an ecological lens
- A recreational and educational waterfront park with stormwater management
- Access to different area of the lake
- Access to the Lake
   Alice watershed has
   been increased to
   provide and encourage
   use
- Able to see more of the lake
- Access to more areas away from the road
- Access to the lake is not as restricted to UF students
- Addition of new bat houses
- Additional interpretive information regarding the lake and its role in the watershed
- All good as is
- All invasive species are removed
- All invasive plants are removed
- All of 3-year items in action
- Alumni and researchers talk about how Lake Alice was an influential outdoor classroom area that shaped their understanding of the

- natural world and science
- Amphitheater or tiered outdoor classroom
- An interpretive trail on the perimeter of the lake
- Animal biodiversity that hasn't been seen in more than 20 years
- Annual symposium on research and teaching related to Lake Alice
- Aquifer injection wells end!
- Around Lake Alice tributaries that are campus waterways have been daylighted/resurfaced and have signage and maps showing the connection to the lake
- Artificially constructed vertical flow wetlands atop the lake, basically acting as stormwater treatment
- At night the fireflies, not seen for decades, embroider the night sky with light
- Awards for stormwater management project execution
- Bat houses are bigger and newer
- Bat houses are protected and populations are stable or growing
- Because of the established perimeter,

- the lake and wildlife are thriving
- Better communicated best practices for wildlife management
- Boardwalk around more of the edge
- Cars are limited to fewer days and hours
- Cleansing biotopes vegetated with native species to filter rainwater
- Community members and students of all ages have an understanding of water issues throughout the state because of the example and education provided
- Connections and clear information/education for visitors that ties together the food organic garden, bats and native pollinator landscapes and good decisions for H20 cans
- Continued commitment and guaranteed preservation and protection of Lake Alice
- Continued/improved shoreline and upland watershed management for water quality and habitat
- Continuing to clean up pollution

- Continuous monitoring prevents reestablishment of invasives and ensures natural veg is regenerating
- Controlled eutrophication in the exposed lake
- Creek conveyances designed to slow velocity of storm water with meandering route and vegetation
- Creek systems are returned to a more natural state
- Creeks that have been channelized are restored to their natural states (meandering, shallow, without trash)
- Debris and sediment from construction residue and runoff
- Disrupted ecosystems
- Easy transportation to and from the lake.
   Maybe a bike rental service or a bus that stops there
- Educate community on its importance
- Either injection wells are closed off OR stormwater entering wells in aquifer meets drinking water standards/springs level water quality
- Enhance and maintain the stormwater water

- quality and storm surge capabilities
- Enhance educational efforts about humanwildlife coexistence and keep large alligators
- Enhanced stormwater management throughout campus.
   Make our stormwater ponds, wetlands, and conveyances amenities and training opportunities
- Enhanced trails for exploring natural areas
- Enhanced trails to enjoy deeper look into the conservation area
- Establish connections with CWC to provide therapy opportunities for students
- Established native plant life, attracting pollinators and native birds
- Exceptional water quality
- Exotic and invasive vegetation is removed to the greatest extent possible from natural areas. Natural areas are spaces that now expose students to valuable and diverse habitats
- Features like boardwalks etc. have been added carefully so as to retain the feel

- Fewer invasive species as native flora/fauna are encouraged/cultivated /protected. Community helps with this, like annual Air Potato Round-Up
- Fewer non-native animal species
- Fifield lot is reconditioned as a trailhead for lake walk with trees, picnic areas
- Filters for the drainage going into the lake
- Fish glinting in its depths with new clarity to the waters
- Fishing remains offlimits to the public/only for approved research purposes
- Flagship stormwater treatment park with dedicated bike lanes
- For natural areas: less than 5% invasive and non-native veg
- Fourth of July fireworks at the lake.
   Seating and grassy areas all the way around to enjoy the show
- Fully connected pervious/natural paths through the entire watershed with educational signage on the ecosystem/its importance

- Fungal species well documented and educational outreach includes their contribution to Lake A ecosystems!
- Further progress with restoration
- Good erosion control methods when constructing storm drain infrastructure
- Goodbye golf course pesticides/fertilizer usage, no golf course OR best managed for supporting ecological health
- Greater cover of marsh grass relative to woody vegetation
- Guided interpretation trail that loops lake and marsh. Discusses vegetation, fauna, and watershed characteristics, trail should provide access to marsh areas not visible now
- Harmony woods is protected
- Have a view around the lake so you can't see any buildings (hide the Dental Tower and other HSC buildings somehow)
- Healthy water quality an example of responsible stewardship and restoration

- Hear as little evidence of road noise, campus noise as possible, screened by native vegetation, and an area that people can appreciate the natural components, rather than human-built
- Hear fall migrant birds in higher abundance because the lake provides an ecological oasis
- Hear nesting colonies of wading birds that have returned to the Lake. Last colonies were destroyed when Facilities inappropriately trimmed edge vegetation in the 70's
- Higher connectivity between Lake Alice and nearby CALM areas
- I hear less traffic and more water, birds, foliage in the wind
- I may see less wildlife if they lose their habitat
- I see a cleaner lake that has benefited from a switch to landscape designs with rain retentive depressions, more absorptive plantings, reduced hardscape surfaces, more water features and increased tree canopy

- I see a lake that is part of a water management design with features of Sweetwater Wetlands Park, including accommodation for major rain events
- I see a lake receiving less runoff because, campus-wide, hard pavement and sidewalks have been reduced or replaced with permeable material
- I see/hear more aquatic birds, similar to Sweetwater Wetlands
- I see less vegetation if development continues on current trajectory
- I want to see the greenery and perhaps a dock
- I will see a monorail or self-driving electric shuttle transporting students, faculty and visitors to and from well-contained commuter parking lots at the periphery of campus
- I would like to feel much the same as I do now, and too many "improvements" can jeopardize that. The Baughman Center turned out well, but

- more of the same might not work
- I would not see or hear gasoline vehicles. All UF fleets will be electric or solar powered. A campus wide phase out of vehicles that emit combustion products (carbon monoxide, heavy metals), leak motor oil and leak antifreeze, all which pollute the watershed, will be completed
- I would really like to have a tall viewing platform, like the one in Paynes Prairie visitor center to have a better look and feel of the lake
- IFAS buildings modernized, made to feel more like a campus. Low Impact Development connections to Lake Alice
- In addition to Lake Alice, incorporate water quality monitoring and lowcost DIY sensor approaches (already being developed on campus) to monitor stormwater system
- In the watershed as a whole - the ponds and sinkholes should feel/function more like a campus amenity

- Include more courses on nature-based therapies and promote sustainable usage of the green spaces
- Increased upstream water storage through green infrastructure (e.g., bioswales)
- Increase usage by the public both quiet and recreational sports
- Increase educational efforts to facilitate wildlife protection
- Increased recreational access
- Interactive spaces
- Interpretation signs in different languages for foreign students/families
- Invasive species are under control and natural veg thrives
- Inventory of all terrestrial and aquatic species has been completed
- Keep dense vegetation around the lake to protect wildlife
- Keep more trees on stream banks to provide shade and keep water temperatures lower
- Keep surrounding areas undeveloped and cleaner
- Lake A area is idyllic and a site of community connection; people

- come for picnics and are more educated about how (not) to interact with Florida wildlife
- Lake Alice area allowed to progress through ecological succession, not "preserved" for false ideal of pristine/pre-colonial nature
- Lake Alice is the favorite gathering point and natural experience at the university. It is the Wild and Natural Heart of the campus
- Lake Alice's importance as a major UF landmark should be fully recognized and protected
- Lake Alice is a changing environment; used to be 1 ha pond -> 18 ha -> 33 ha of lake and marsh. Allowed to mature -> more habitat most suitable for biota including humans
- Lake Alice is used as a resource for extension to highlight best management practices for Florida ecosystems. Award-worthy management of natural resources
- Lake Alice needs to be celebrated by the broader UF/GNV

- community. The best way to build ownership of the lake is to get more people to love it (festivals, events, art shows etc.)
- Lake Alice south improvements for casual recreation
- Lake powered by GRU, a more sustainable, cleaner energy source that uses less fossil fuels and doesn't burn general trash to generate electricity, thus limiting pollution in precipitation
- Larger trees, even more forested with native plants
- Leave area undeveloped - manage for maximal biodiversity - the lake is a unique resource that can be a huge draw if UF protects it and manages it to keep it intact - and educate about this fantastic resource
- Less algae
- Less invasive plants
- Less traffic areas and more for exploration
- Lighted gazebos on land with seating and wheelchair ramp access
- Long boardwalk through marshy and swampy portions of water

- Looks very marsh and less lake
- Lots of spaces for native birds, insects, all the creatures that make up a thriving ecosystem!
- Low impact development across campus
- Low impact development network connecting environmentally important areas
- Maintain or improve wildlife corridors connecting wetlands and creeks on campus. Less alligators having to cross streets
- Maintenance of island as roosting habitat for birds
- Make view of Lake
   Alice pure green space
   with no buildings find
   ways to eliminate
   views of buildings like
   HSC Dental Tower
- Manage Lake Alice for biodiversity - return of species like purple gallinules and fivelined skinks
- Manage waterway for wildlife - keep boats off of lake
- More animals, less algae
- More boardwalk/trail access through the basin marsh and forested areas

- More boardwalk/viewing opportunities on other parts of the lake
- More extensive wheelchair accessibility - a boardwalk and level sidewalks
- More fish
- More general education on wildlife using the lake and around the lake!
- More open natural spaces around the eastern side of the lake/marsh
- More parts of the watershed are protected and left in a natural state
- More people use Lake Alice
- More traffic noise due to uncontrolled growth of population and buildings
- More wellness walks including forest bathing for staff and faculty
- Mostly undeveloped shoreline, but free of invasives
- Native plants that filter water
- Native vegetation replaces non-natives, and relies on local rainfall and nutrients
- Nearby paved parking is removed (west of Lake Alice)

- New courses are developed and use the area (biodiversityrelated courses, water management courses, climate change courses, and more)
- New/remodeling project policy, recurrent funding, and projects addressing upstream stormwater have decreased the amount of runoff and erosion in/near lake
- Nitrogen, phosphorus, etc. will all be at sustainable levels. Lake Alice will not experience any harmful algae blooms
- No Ardisia in natural areas or anywhere really
- No concern that Trustees or other political figures will attempt to develop Lake Alice, or pursue projects that can damage the natural function
- No expansion of automobile transport along southern and Eastern edges
- No loss of land in conservation areas -THIS is crucial!
- No people fishing
- No/very limited invasive species
- Outdoor classrooms

- Outdoor classroom areas for UF students, but also for local High/Middle School students
- Outdoor classroom area where different departments can hold lectures/outdoor events
- Outdoor workshop areas
- Overall footprint of Lake Alice + conservation area retained
- Parking lots and hardscape have been transformed into natural gardens with involvement from many departments and colleges on campus
- Part of what draws people to UF is the balance we have always maintained between nature and progress
- Pier/walking area
- Pesticides and fertilizers are minimized or eliminated across campus
- Plant growing zones change due climate change
- Pocket trails ADA accessible
- Potential loss of animal wildlife - decline of fish, and macroinvertebrates

- Privately owned Greek lots retain the bundle of rights that come with that ownership
- Rather than UF continuing to deny its role in destroying the lake, UF becomes a steward of the environment
- Really clear and healthy lake
- Recovered connection between Lake Alice and Lake Alice South
- Recreation and education, protection, and research around the lake
- Redevelopment at the trails, the Hume field turned into a welldesigned park with green infrastructure and served as a great educational site for the public
- Regular events and engagement with the cultural importance of Lake Alice area
- Restore/revitalize channelized creeks
- Restore unique
   habitats that are no
   longer present on
   campus, such as the
   stream habitat of
   "Crapper Creek" south
   of O'Connell Center
   (now Graham Woods)
- Rising water levels
- Signage with a contact number or webpage

- address to instruct people on how they can help with the overall conservation and protection effort
- Signs for bugs, insects (showing good or bad)
- Signs for plants (pond cypress, taxodium ascendens), with what leaf and nuts look like
- Signs for the animals (little egret, egretta garzetta), with what they eat and sound they make
- Signs for the plants and wildlife you can see on the trails or by the water
- Solar panel grid near bank
- Still no fishing or boating
- Stormwater treatment cells (like Sweetwater)
- Students, faculty and staff using the lake as an amenity, not an inconvenience to drive around
- Substantial boardwalk improvements that make LA accessible
- Survey of all current plants and animals in Lake Alice and the watershed to collect information about what is invasive, info about microclimate, population affected by the watershed

- Systems at the entrances to Lake Alice that filter the incoming water of harmful debris and trash and collect it, where it is then properly taken care of
- Systems that collect water overflow and clean it to make drinkable water
- Techniques used and show students how it works
- The bat house stays the same and the field is covered like a greenhouse
- The deep-water injection wells are plugged, or we are assured, in perpetuity, that the water entering the aquifer is clean
- The extension of wetland filtration areas means the injection into the aquifer has stopped
- The islands are cleared so that alligators can sun in a protected space
- The Lake Alice
   watershed
   management plan is
   shared, and becomes a
   model. Because UF is
   essentially a closed
   system, progress can
   be monitored

- The Lake's and the watershed's 2000+ year history is known by all, including histories of Indigenous peoples who lived in the Lake A/North Central Florida region
- The Lake, and the watershed, understood by everyone using campus--where does water drain from, and to? Everyone knows how to protect the watershed, and water
- The public is boating on the lake
- The same animal biodiversity
- The same in a sense of undeveloped area
- The same stormwater treatment
- The same view
- The water quality is clearly more noticeable
- The watershed has served an important purpose as hurricanes and torrential rains have a path to go
- There are some historical markers around the lake that mention the Native American presence around the lake in millennia past
- This area is still a central feature on campus, drawing folks

- to use it in support of their well-being
- Three times as many students now enjoy the tranquility and paths and bikeways make it accessible
- Thriving local species of flora, fauna, and wildlife; reduced/eliminated invasive species
- Traffic pattern changed to route on Hull Road - Lake Alice road becomes pedestrian and bicycling
- Trail that circumnavigates the lake, including areas that are not currently accessible on north side
- Treatment wetland is used to educate students on sustainable alternatives to conventional water

- treatment and its benefits to wildlife and general ecology
- Tree canopy maintained
- UF and the watershed are recognized as a national example of how to ecologically manage campus stormwater and create a robust conservation network on a campus
- UFPD actively patrols lake access
- Use flow of water from around the watershed going to Lake Alice to generate clean energy.
   Dams that water can flow through that spins automobile and produces electricity while also filtering out trash
- Waterfront park, public transportation only on Museum Road, EV bus buzzing

- Water quality is much improved
- Water quality is pristine. Incoming water is no longer impaired. Water is treated with a treatment wetland prior to discharge to the lake
- Water quality meets standards
- Webcams so we can visit remotely
- Well-funded department who is "in charge" of Lake Alice
- Wetlands filter water and handle flooding
- With the work of the community I see a successful planning effort
- XR/AR equipment to show how Lake Alice used to look like and, what it looks like in a storm condition

## Vision Feedback

### Overview

The ET and CT worked collaboratively together to identify themes and subthemes within each of the three- and ten-year participant contributions. From this process it was identified that there were similarities between the short- and long-term vision input contributions. Therefore, it was decided to combine these, which resulted in five overarching vison themes as listed below:

- Environmental Conditions and Stormwater Management
- Recreation, Accessibility, and Education
- Restoration, Conservation, and Biodiversity

- Watershed Management, Policies, and Maintenance
- Status Quo or Deteriorating Conditions

The CT provided draft vision narrative, based on participant contributions, for each of the above vision themes. The PT then provided feedback on the above vision themes and suggested four overarching vision themes as listed below.

- Improve environmental conditions and stormwater management
- Provide recreation, access, and education (around the Lake and its tributary creek system)
- Organizational accountability, collaboration, and responsiveness
- Restoration, conservation, and biodiversity

These four overarching themes and their associated subthemes were presented to the SC at their third SC meeting for feedback on what they liked, what was missing, and what they would change. From this meeting, volunteers for a Vision Task Force (VTF) were identified, including two SC members, two PT members, and the CT. The VTF worked through a series of meetings to draft vision statements for each of the vision themes. The draft vision statements were then presented to the PT for further feedback, refinement, and adoption. Below is a summary of feedback from the SC on vision themes and an overview of the work of the VTF.

### SC Feedback

The third SC meeting was held on November 29, 2023, via Zoom to review the four overarching vision themes and associated subthemes for the Lake Alice watershed. The participants at this meeting included members of the SC and PT. The CT was in attendance to provide an overview of project updates and to clarify other technical aspects. Participants were divided into small groups and used a rotating posters process to discuss and respond to three questions for each theme and associated subthemes. The three questions were:

- What do you like about this theme / subtheme?
- What is missing?
- What would you change?

The groups spent 5-7 minutes at each theme poster and entered their responses on a Google Slide for each theme. As they rotated to new theme posters, they were asked to add new responses and to put an asterisk next to existing responses they wanted to reinforce. They rotated back to their final poster in which they were asked to bold key items.

The SC recommended changes and additions to vision themes and subthemes, and ideas related to what should be included in the WMP for each theme. The contributions from each theme are shown below. The ideas related to the WMP were separated out and can be seen in the last column of each theme table. Included below are the original themes and subthemes, the specific feedback and the revised themes, subthemes, and considerations for the WMP. The feedback was used by the VTF to draft vision statements for each of the themes that were refined by the CT and adopted by the PT.

# Theme 1 Feedback

# Theme 1 Improved environmental conditions and stormwater management

Vision Subthemes	What do you like?	What is missing?	What would you change?	What should be incorporated into the WMP?
<ul> <li>A. Enhanced solid waste management</li> <li>B. Enhanced stormwater treatment and management</li> <li>C. Improved flood control</li> <li>D. Improved vegetative communities</li> <li>E. Improved water quality</li> <li>F. Protected and repaired capital assets</li> <li>G. Reduced discharge to injection wells</li> <li>H. Reduced algae</li> </ul>	<ul> <li>Enhanced solid waste management - lots of garbage pulled around the Lake</li> <li>Seems comprehensive*</li> <li>Subthemes cover all aspects of the vision theme</li> </ul>	<ul> <li>New construction/future development issues?</li> <li>Some overall clarification (language) of terms for existing subthemes</li> <li>Stormwater treatment starts with source control (runoff)*</li> </ul>	<ul> <li>B&amp;C may be a little redundant - accomplishing B will impact C</li> <li>Clarify injection well comment*</li> <li>Clarify type of algae (reduce algal mats)</li> <li>Clarify what is meant by Solid waste - i.e. trash and sanitary sewer</li> <li>Change "capital assets" to something elsemaybe infrastructure and utilities</li> <li>For H reduce conditions that lead to harmful algae blooms (?)</li> <li>No changes</li> <li>Seems like the flood control and reduced injection are in possible conflict (Bat house well is waste water, but Baughman well is lake level control)</li> <li>What exactly do we mean by water quality? TEAM 4 agrees!</li> </ul>	<ul> <li>Benchmarks/thresholds</li> <li>Clarify "improved veg comm" includes landscaping that filters the water</li> <li>Defining the issues surrounding the vegetative communities-what are the challenges, how would they be improved, what aspect of the vegetative community are we talking about</li> <li>Missing compliance strategies</li> <li>More details/refinement for "improved water quality" - could mean different things to different people</li> <li>Need more LID projects upstream to help reduce flow into the lake for flood control</li> <li>New buildings (and renovated when possible) incorporate better stormwater infrastructure*</li> <li>Reporting flood locations (buildings, streets, etc.)</li> <li>What happens to reclaimed water if/when the golf course moves?</li> </ul>

From the feedback for theme one, the ET and CT worked to revise the vision theme and subthemes as shown below:

## Revised Theme 1 Improved environmental conditions and stormwater management

- A. Enhanced solid waste management (e.g. trash)
- B. Enhanced stormwater treatment and management
- C. Improved flood control
- D. Improved onsite stormwater management for new and renovated buildings
- E. Improved vegetative communities
- F. Improved water quality
- G. Protected and repaired infrastructure and utilities
- H. Reduced discharge to injection wells
- I. Reduced algal mats

# Theme 2 Feedback

# Theme 2 Provide recreation, access, and education (around the Lake and its tributary creek system)

Vision Subthemes	What do you like?	What is missing?	What would you change?	What should be incorporated into the WMP?
A. Clarified allowable uses  B. Expanded trail system and recreational features  C. Increased academic engagement and educational programming  D. Increased public engagement and nature-based activities/events  E. Reduced traffic impacts adjacent to Lake Alice	<ul> <li>Captures the social aspects of interacting with the lake</li> <li>Expanded trail system</li> <li>Like the expanded trail system, having dedicated places for walking</li> <li>Like the public engagement aspect, need to be able to use Lake Alice for educating about water issues</li> <li>Simple and direct*</li> </ul>	<ul> <li>ADA?*</li> <li>Defining education?</li> <li>Instead of recreation, say 'passive recreation' *</li> <li>The Lake and its watershed are an education &amp; research opportunity for the state &amp; beyond restormwater ponds</li> </ul>	<ul> <li>Clarifying subtheme         E, as it is interpreted         differently</li> <li>Clarifying what         'access' means</li> <li>The subthemes         should be more         direct in what         they're asking for</li> <li>What traffic is         wanted compared         to trying to be         reduced?</li> </ul>	<ul> <li>Any new trails should be passive and low impact (not paved, without high intensity lighting)</li> <li>Balance access with need to limit impacts on resources</li> <li>Clarify allowable use. Who is enforcing and what is being enforced? - both in and around the lake</li> <li>Funding source for academic related projects</li> <li>How and where will the education be embraced and enforced?</li> <li>Making sure that trails and access don't create too much light pollution or affect the natural area of the lake</li> <li>Not much access to the area on South side</li> <li>Permitting education and awareness - as part of MS4 permit requirements - great location for this education</li> <li>Safety</li> <li>Signage- interpretive/educational signage (especially opportunities to understand that the lake is part of a large system)</li> <li>Stormwater education around the Lake, with broader implications</li> <li>There's a lot of focus on the lake itselfmaybe some opportunities to focus on other parts of the watershed</li> </ul>

## Revised Theme 2 Expanded Passive Recreation, Access and Accessibility, and Education

- A. Clarified allowable uses for the lake
- B. Expanded trail system and recreational features around the lake and watershed
- C. Increased use of lake and watershed for academic purposes and educational programming
- D. Increased public engagement and nature-based activities/events
- E. Reduced vehicular traffic and increased sustainable and mass transportation around the lake

# Theme 3 Feedback

# Theme 3 Organizational accountability, collaboration, and responsiveness

Vision Subthemes	What do you like?	What is missing?	What would you change?	What should be incorporated into the WMP?
<ul> <li>A. Clarified responsibilities among UF departments</li> <li>B. Endorsed watershed management plan</li> <li>C. Funded stormwater management</li> <li>D. Increased collaboration with City and County</li> </ul>	<ul> <li>Emphasis on collaboration with City and County</li> <li>Really like the collaboration with regional partners, especially with the NPDES permits</li> <li>This is a very important theme - buy-in and endorsement is critical - funding is critical!</li> <li>We like all themes.</li> </ul>	Strong emphasis on funding. Unfunded mandates go nowhere.	<ul> <li>Clarify "academic and administrative" departments</li> <li>Clarity on what collaboration means.</li> <li>Clarity on what responsibilities mean especially working collaboratively rather than siloed*</li> <li>Enhancing collaboration opportunities between in-lake conditions and watershed activity</li> <li>Wordingdepartments might not be the right term (implies academic dept)</li> </ul>	<ul> <li>Clarified process for approvals comments?* at the University level (Lakes, Vegetation &amp; Landscaping committee)</li> <li>Clarified responsibilities is essential to making this plan a reality**</li> <li>Expand collaboration to include FDEP and WMD</li> <li>Funding for monitoring</li> <li>How to delegate responsibilities to departments and keep them accountable*</li> <li>How do we generate the money?</li> <li>In addition to collaboration with city and county, what is the state-level participation?</li> <li>Ongoing vs. one-time funding*</li> <li>Some kind of permanent committee? continued oversight</li> <li>What are the funding possibilities?*</li> </ul>

## Revised Theme 3 Supported and Funded Organizational Accountability, Collaboration, and Responsiveness

- A. Clarified roles and responsibilities within UF Business Affairs Departments
- B. Watershed management plan endorsed and supported by UF leadership, faculty, staff, and students
- C. Fully funded watershed management plan
- D. Increased partnerships and collaboration with state, regional, and local agencies
- E. Enhanced collaboration in watershed activity to improve in-lake conditions

# Theme 4 Feedback

# Theme 4 Restoration, conservation, and biodiversity

Vision Subthemes	What do you like?	What is missing?	What would you change?	What should be incorporated into the WMP?
<ul> <li>A. Continued protection of conservation areas around the watershed resources</li> <li>B. Increased diversity of flora and fauna</li> <li>C. Reduced sedimentation</li> </ul>	conservation and biodiversity instead of restoration*  Important theme & area of focus	<ul> <li>How LA watershed has connectivity with city/county/state lands, esp for wildlife movement in urban area</li> <li>Link between the education/social vision and this vision</li> <li>Showcase of how water management is handled at UF and comparing to other universities</li> <li>Verbiage- around? vs IN the watershed</li> </ul>	<ul> <li>Break apart A. so protection and conservation is more specific and detailed</li> <li>C seems more related to vision #1 (stormwater)</li> <li>Can sedimentation and erosion be linked?</li> <li>Change "Restoration" to "Enhancement"*</li> <li>This is a very important and broad theme. If the themes will be ranked or presented in an order, this would be #1. (*if we're talking about this being the overall goal of enhancement of the watershed and Lake)</li> </ul>	<ul> <li>Benchmarking/metrics-population data for flora and fauna</li> <li>Can sedimentation and erosion be linked?</li> <li>Clarification about where sedimentation is occurring to define strategies on how to reduce*</li> <li>Explaining possibilities for B. How do we increase diversity? Balanced ecosystem may be a better goal than simply increasing diversity</li> <li>Showcase of how water management is handled at UF and comparing to other universities</li> <li>Who is responsible?</li> </ul>

# Revised Theme 4 Enhanced Conservation and Biodiversity

- A. Increased protections for conservation areas and the watershed
- B. Continued protection of the watershed
- C. Appropriate biodiversity of flora and fauna
- D. Increased natural area connectivity with city, county, and state lands for wildlife movement
- E. Reduced sedimentation to protect biodiversity

### Other Considerations

Other considerations as provided by participants:

- Compliance, reporting and safety
- Determining how to generate buy in from the entire University/City community
- Explaining, exploring, and resolving the tension between Lake Alice as a historic water body (a lake and its creek system) and Lake Alice as a stormwater management system

From the feedback from the SC and PT members at the third SC meeting, the revised themes were:

- Improved environmental conditions and stormwater management
- Expanded Passive Recreation, Access and Accessibility, and Education
- Supported and Funded Organizational Accountability, Collaboration, and Responsiveness
- Enhanced Conservation and Biodiversity

## Vision Task Force (VTF) Feedback

### Overview

The purpose of the VTF was to work collaboratively together to review and discuss SC feedback for four vision themes and create associated draft vision statements. Two facilitated meetings were held via Zoom, each being one and a half hours. Draft vision statements were then refined by the CT and presented to the PT for further feedback and adoption.

Below are the member's names, affiliations, and their LAWMP role.

### **VTF Members**

Name	Affiliation	LAWMP Role
Rachel Mandel	UF Administration: Planning, Design, and Construction	PT
John Guerra	UF Administration: Env Health and Safety - Occupational Safety &	SC
	Risk Management	
Eban Bean	UF Faculty: Ag. and Biological Eng Center for Land Use Efficiency	SC
Linda Dixon	UF Administration: Planning, Design, and Construction	PT-Project Manager
Amy Goodden	WSI	CT-Project Engineer
Scott Knight	WSI	CT-Project Manager

For purposes of this project a vision statement was defined as being a brief statement describing the clear and inspirational long-term desired change resulting from an organization or program's work.

The VTF reviewed the vision statement from the *Campus Landscape Plan* to discuss qualities and characteristics to apply to the Lake Alice watershed vision. We used the following questions as a guide to the discussion:

- 1. What do you like about this vision statement?
- 2. What do you wish it had more of?
- 3. How would a statement like this be valuable to the LAWMP?
- 4. What else would you want to see in the vision statement?

Over the two meetings the process the task force used to create vision statements for the Lake Alice watershed was to:

- Silently read vision theme and subthemes
- Engage in whole group discussion about the meaning of the vision theme and subtheme
- Individually brainstorm how they would finish the statement "As a result of our collective actions we want to see..."
- Work in pairs to share and merge ideas
- Identify as a group necessary items to include in draft statements for each theme
- Use a scale of agreement to check for consensus

The scale of agreement was used as a Likert rating scale to provide options for level of support for the draft vision statements. The VTF was given the option of rating one through five for each draft vision statement. The descriptions of the level of support are in the table below. Based on the task force's response more discussion ensued, or we moved on to the next vision theme.

## Scale of agreement: level of support

1	Fully support
2	Support with a minor point of contention, good enough
3	Support with reservations
4	Don't like but will support
5	Don't support at all

The CT used the task force's feedback to draft a vision narrative and final draft vision statements in which the PT provided more feedback and adopted four vision statements for the LAWMP as seen below:

## **Environmental Conditions and Stormwater Management**

Lake Alice is the heart of campus and symbolizes the University's dedication to environmental stewardship. The lake and watershed are inextricably linked to successful stormwater conveyance and treatment on campus and provide vital ecosystem services. Incorporation of green stormwater infrastructure, low impact development, and best management practices will reduce flooding, erosion, and sedimentation that impacts the University's assets and the natural environment. A visible, successful, and celebrated stormwater system will further the University's educational mission by telling the stormwater story while showcasing a commitment to innovation and excellence.

### Recreation, Access and Accessibility, and Education

Lake Alice and the Conservation Areas provide a unique network of natural spaces integrated within the built environment of campus. This proximity offers consistent connection to nature and recreational opportunities that further the University's academic mission and enhance well-being. Increasing accessibility, passive recreation, and intentional programming in and

around these areas raises awareness and appreciation for the watershed and University while promoting natural discovery.

## **Conservation and Biodiversity**

The extensive natural areas on campus are an integral part of the university and community experience. The protection and enhancement of these areas are essential to foster biodiversity, protect wildlife habitats, and expand connectivity. These ecologically diverse communities provide a living laboratory for outdoor learning and best management practices for urban stream ecology and wildlife movements.

## Organizational Accountability, Collaboration, and Responsiveness

The University of Florida strives to have well-maintained buildings and a vibrant landscape that is functional and well-used. Extending this standard to all natural areas and stormwater features requires clear coordination, communication, and a responsive organizational framework. Stormwater management is a critical component of preserving and enhancing the campus experience and image. Successful management depends on assigned responsibility and funding that ensures necessary projects and upgrades can be made. Endorsement of an adaptive watershed management plan with dedicated, recurring funding acknowledges the ongoing nature of watershed stewardship.

# **Draft WMP Feedback**

# **Funding Mechanisms Feedback**

The CT sought feedback from the SC and the PT on funding methods and mechanisms that would be the easiest to implement and have the highest impact on funding stormwater management. The feedback was intended to help guide the recommendations in the WMP.

The CT clarified various funding methods and mechanisms that are available and typically used for the funding of stormwater projects, operation, and maintenance. The CT reviewed the following with the SC and PT before receiving their feedback:

- Stormwater service charge
  - o Based on a stormwater program
  - Based on the cost of providing service
  - Rate considerations
    - Impervious area
    - Impervious and gross area
    - Gross area and development intensity
    - Gross area only
    - Ability to be implemented
    - Equity
    - Uniformity
- Different types of rates/surcharges to be considered
  - Base rate
  - Basin-specific surcharges to cover capital projects
  - Surcharges for vulnerable facilities

- Reductions in fees for projects that incorporate detention, retention, infiltration, treatment, or energy dissipation
- Water quality
- Intensity
- Level of service

The SC and PT were then presented with three different funding methods and two different funding frequencies to provide feedback on, as shown in the table below.

## Funding mechanisms examples

Funding Method	Funding Frequency	
Impervious area	One-time	
Gross area and impervious area	Recurring	
Gross area and intensity		

The SC and PT were asked to consider the question, which of these funding methods would have the highest impact on stormwater management and be the easiest to implement? Most of the SC and PT identified the funding methods of impervious area, and gross area and impervious area with the frequency of recurring funding as having the highest impact on stormwater management and being the easiest to implement.

# Stormwater Project Ranking Criteria Feedback

As part of the project, the CT sought feedback on ranking criteria from the SC and PT. The ranking criteria was to be used to identify the priority erosion and flooding projects.

During the third SC in November of 2023, the CT reviewed ranking criteria categories with SC and PT, provided clarifications, and examples. The SC and PT were able to ask clarifying questions. To determine the groups consensus around ranking criteria, Mentimeter was utilized to poll the group. The feedback will be used by the CT to recommend a process for prioritizing stormwater projects as part of the WMP. This is expected to take the form of a decision matrix with ranking criteria.

The CT presented two types of ranking criteria categories. The first were non-negotiable categories that will be used to identify projects of high importance and those projects to be addressed first. The CT was not seeking feedback on these as the PT had decided these would be used to rank projects. The second were negotiable categories, those in which the CT wanted feedback on from the SC and PT on the best ones to use for ranking projects. The table below provides more details on the categories.

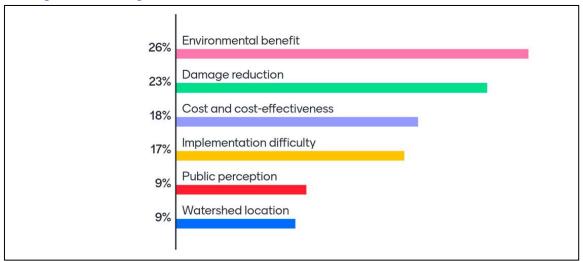
# Ranking criteria categories

Non-negotiable categories	Negotiable categories
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- Life safety
- Failure of non-stormwater infrastructure
- Watershed location
- Environmental benefit
- Public perception
- Implementation difficulty
- Damage reduction
- Cost and cost-effectiveness

A 100-point ratings question was used with the SC and PT to collect feedback on the negotiable categories for ranking. The 100-points ratings allowed participants to distribute 100 points among the six categories. The ratings are shown in percentage, with the most popular choice ranked from the top. There were twenty participants that responded to the question. Below are the results:

## Ranking criteria ratings results



Based on this feedback the CT used this to develop the ranking criteria matrix and provide it as part of the LAWMP.

# SC/PT and Implementers Feedback Workshops

### Overview

The CT and ET held two feedback workshops with the SC, PT, and UF administration staff (implementers) on March 6, 2024, in the Reitz Union Room G330. The first workshop was with the SC and PT in the morning followed by an afternoon workshop with the PT and implementers from various departments.

The purpose of the workshops was to receive feedback on a select set of draft WMP recommendations. Five draft recommendations related to stormwater projects were presented to the SC and PT in the morning. Five different draft recommendations related to stormwater operation, management, and maintenance processes were presented to the PT and implementers in the afternoon.

Each group was presented with an overview of the project goals, tasks status, and engagement efforts. Both groups then reviewed the final adopted vision statements in small groups and had deeper discussions as a whole group about the connection of the vision to the draft recommendations.

The morning workshop had thirteen people in attendance at the beginning, with two people having to leave early prior to providing feedback on the draft recommendations. The afternoon workshop had fourteen people in attendance, and all were able to attend the full workshop to provide feedback on the draft recommendations.

## SC/PT Workshop

Five draft recommendations related to stormwater projects were presented to the SC and PT. Recommendation descriptions are below and include features, benefits, and related vision elements.

# **Draft Recommendation A: Yulee Stormwater Park**

#### Features:

- Located at the Campus/City interface
- Stormwater capture, attenuation, and water quality treatment at the upstream end of the watershed
- Accessible, educational, and reflective spaces inclusive to students and the greater campus community
- Signage telling the stormwater story on campus
- Incorporate BMPs and LID features with educational opportunities

#### Benefits:

- Improves water quality and reduces peak stormwater flows, reducing downstream environmental impacts
- Highlights the importance of stormwater management in a prominent area

### Vision Elements:

- Environmental Conditions and Stormwater Management
- Recreation, Access and Accessibility, and Education



# **Draft Recommendation B: Creek Step-Pool Stabilization**

#### Features:

- Stabilization of critical stormwater conveyance
- Step pools dissipate energy in steep sections
- · Reduced erosion from high-velocity flows
- Increased accessibility and recreational space with integrated trails highlighting creek vistas and the sound of moving, falling water
- Educational opportunities about stormwater management, erosion, and sedimentation

#### Benefits:

- Decreased erosion and sedimentation
- · Reduced invasive understory along creeks
- · Designed to be maintained

### Vision Elements:

- Environmental Conditions and Stormwater Management
- Recreation, Access and Accessibility, and Education
- Conservation and Biodiversity
- Organizational Accountability, Collaboration, and Responsiveness



## **Draft Recommendation C: Lake Alice South Stormwater Wetland**

#### Features:

- Water quality treatment for stormwater from Archer Road that enters Lake Alice
- Capture of trash and sediment to avoid deposition in Lake Alice
- Recreational features with integrated trails around wetland
- Vegetated marsh with forested components to increase treatment and habitat
- Educational opportunities about stormwater management and trash in the watershed

### Benefits:

- Reduced erosion and sedimentation
- Improved wildlife habitat
- · Designed with a maintainable trash trap and sediment sump

#### Vision Elements:

- Environmental Conditions and Stormwater Management
- Recreation, Access and Accessibility, and Education
- Conservation and Biodiversity
- Organizational Accountability, Collaboration, and Responsiveness



## **Draft Recommendation D: Graham Woods Stabilization**

#### Features:

- Stabilization of highly-impacted drainage
- Reduced cover of invasive vegetation and re-vegetation
- Increased accessibility and user access features
- Maintainable trash and sediment trap
- Educational opportunities about stormwater management and trash in the watershed

#### Renefits:

- · Reduced erosion and downstream sedimentation
- Improved stability with native vegetation
- Habitat enhancement

#### Vision Elements:

- Environmental Conditions and Stormwater Management
- · Recreation, Access and Accessibility, and Education
- · Conservation and Biodiversity
- Organizational Accountability, Collaboration, and Responsiveness



# **Draft Recommendation E: Dispersed Low Impact Development**

#### Features:

- LID incorporated in the watershed to store water and reduce peak flows
- Improved water quality treatment
- Education about stormwater management
- Aesthetically pleasing, functional stormwater management
- Maintainable pervious pavement

### Benefits:

- Reduced peak flows
- Improved water quality treatment
- · Designed to be maintainable

#### Vision Elements:

- Environmental Conditions and Stormwater Management
- Recreation, Access and Accessibility, and Education
- Organizational Accountability, Collaboration, and Responsiveness



The SC and PT rotated through draft recommendation feedback posters in six rounds and were asked to identify the strengths, weaknesses, challenges, and opportunities (SWCO).

For the first round the group was asked to read the draft recommendation, discussed the SWCO as a group, and record responses on the poster. For their second through fifth rounds they rotated to the subsequent posters, read the description of the draft recommendations, discussed the SWCO as a group, read the existing responses, added stars for items they agreed with, added question marks for items needing clarifications, and added any new thoughts or ideas. For the sixth round the groups rotated to their original starting poster and highlighted significant items. Each group then reported out to the whole group which allowed for deeper discussions. Below are the posters as written by the small groups from the SC and PT workshop.

Draft Recommendation A: Yulee Stormwater Park		
Strengths	Weaknesses	
Location: lots of impervious surfaces *Resolve maintenance issues *Visibility/access to many people In current CMP See from 13th street Natural basin (clay lined) Upstream storage Improves campus aesthetic	Trade-off programmable open space (when dry)  Virtually no downside	
Challenges	Opportunities	
Funding Potential pest and wildlife control Enforcing permitted use policy Existing utilities	Connects to Jennings headwall project Student interest (S.G. blue light phones) Passive recreation CMAC: Opt RTC Improve accessibility (cypress) Attracts desirable wildlife (birds) Gives the space a purpose Phased approach with Jennings Creek step pools	

Draft Recommendation B: Creek Step-Pool Stabilization		
Strengths	Weaknesses	
If access is maintained - should be easy to inspect and repair  *Beautification  • Aesthetics • Sound • Movement  Solve erosion issue  Reduce erosion of phosphorus rich sediment  Amenity adjacent to residence halls  Valuable education area	*Constructability *Disturbance during construction and maintenance Short circuit around structure	
Challenges	Opportunities	

### **Draft Recommendation B: Creek Step-Pool Stabilization**

\*Access to creek during construction

Public perception around clearing in woods

Balance replanting strategy

• Open understory for views, access, and maintenance vs. dense habitat

Area limited to work
Doing it well can be very aesthetic or not
Train maintenance staff

Maintaining easy safe access for all

Added storage pools in the southwest portion of Jennings creek

Invasive plant control

RSE - baseflow through filter media for load reduction (engineered/BAM)

Educate campus community about current risks to infrastructure

Draft Recommendation C: Lake Alice South Stormwater Wetland	
Strengths	Weaknesses
Relatively large area to accomplish needs Increased water storage and retention Otter habitat enhancement! Good use of underutilized real estate Additional detention and treatment capacity Additional opportunity for stormwater wetland demonstration	Location as a used/known resource
Challenges	Opportunities
Less known/traveled area - not seen Getting people there - making it known Maintenance of trash trap Road trash! Not well known/understood as natural area	Improving habitat for unique wildlife (otters) Freedom to be creative Restoration plus possibility of mitigation for projects on main campus Opportunity to create an identity Connect visually to wetlands on the north side of Mowry Rd. Lots of employees and patient's families in nearby research building that can use for passive recreation Add connectivity between Mowry Rd. and Archer Rd pedestrian/bike Accessibility to on campus wetlands Enhance utility road for pedestrian east/west connection

Draft Recommendation D: Graham Woods Stabilization	
Strengths	Weaknesses
Energy dissipation/retained water Stop increased sedimentation Will address a significant problem - erosion	Required maintenance Level of disturbance Ability to construct

	Access Will be \$\$ Step pool for grade rather than pond Explicitly show pipes and energy dissipation (opportunity to improve figure)
Challenges	Opportunities
Steep grade Permission to clear Buy-in for the campus community Impacts to wetlands \$ Public (non-campus) perception of need Confirm geology/soils (sinkhole?) Design challenge about how much access and visibility to allow ultimately	Coordination with Flavet Rec Complex *North/south pedestrian connection How to revegetate (Invasive species control) Increased usability of the space and sight lines and surveillance

Draft Recommendation E: Dispersed Low Impact Development	
Strengths	Weaknesses
Control near source *Can be aesthetically pleasing Visibility Training resource Can be implemented throughout campus Smaller scale and more affordable Some features could be "naming opportunity"	May require more maintenance Requires more diverse management Limited volume control Confusion around ownership or responsibility
Challenges	Opportunities
Existing policies implementation or ineffective implementation - why? Distribution vs. cost effectiveness Education and training maintenance Limited space in campus core Required maintenance - higher than expected! Existing utilities Having the proper tools to maintain the space	*New construction Implementation Parking garages required Underground retention *Educating community about LID throughout campus Relatively inexpensive to implement Adds interest Reinforces what UF already does

The SC and PT were asked to provide their level of agreement for each recommendation using a scale from 1 to 5 as shown below. The level of agreement was collected using Mentimeter, an online survey tool. Nine out of eleven people completed the survey.

#### Level of Agreement Scale

1	Strongly disagree - Don't support at all
2	Slightly disagree - Don't like but will support
3	Somewhat agree - Support with reservations
4	Agree - Support with a minor point of contention, good enough
5	Strongly agree - fully support

### SC/PT Initial Draft Recommendations Level of Agreement Results



## Additional Feedback from SC/PT

The group was asked to provide any additional feedback that they would like the CT to consider as they draft recommendations. Their feedback is shown below.

- Consider recommendation A and C as one strategy, B and D as the second strategy, and E as the third strategy
- Implementation might be based off access to the site
- What is our quantitative goal as we do projects upstream of Lake Alice
- Cost of damage to buildings from flooding
- Consider sources (nutrients, sources control, evaluate sources likes reclaimed water and determine loading)
- Nutrient loads of Lake Alice compared to other lakes in the state
- Replace reclaimed irrigated areas with native plants to absorb nutrients
- Have a range of some that are inexpensive and some more expensive (Bang for buck, consider life safety as a priority, then nutrients)
- Educate communities on current situation and why these recommendations are needed (signage for Graham Woods, use Horticulture's Spring Festival as a model)
- Monetize the benefits

## PT and Implementers Feedback Workshop

Five draft recommendations related to stormwater operation, management, and maintenance processes were presented to the PT and Implementers. Recommendation descriptions are below and include features, benefits, and further description of how the recommendation is related to the vision elements.

## **Draft Recommendation A: Project Planning for Sustainable Infrastructure**

**Recommendation:** Use the Envision Sustainability Framework and Rating System

#### Features:

- Rating system for assessing the sustainability of civil infrastructure projects based on 64 sustainability and resilience indicators organized around 5 credit categories:
  - o Quality of Life
  - Leadership
  - o Resource Allocation
  - Natural World
  - o Climate and Resilience

#### Benefits:

- Collaboration tool to strengthen communication and partnerships
- Holistic and continuous review of organizational readiness for capital projects
- Flexible format allows the review to include Master Plan goals and elements

#### Vision Elements

#### **Environmental Conditions and Stormwater Management**

Using a standard framework to evaluate all projects on campus will allow UF to identify opportunities to incorporate green stormwater infrastructure, low impact development, and best management practices to reduce flooding, erosion, and sedimentation. Consistent communication will allow refinement of design standards based on feedback from operation & maintenance activities.

#### Recreation, Access and Accessibility, and Education

Increasing accessibility, passive recreation, and intentional programming in and around these areas raises awareness and appreciation for the watershed and University while promoting natural discovery.

#### **Conservation and Biodiversity**

Using the Envision Framework as a tool to evaluate organizational readiness will assist UF in defining the standards needed to comply with the LVL goals while operating and maintaining their infrastructure.

#### Organizational Accountability, Collaboration, and Responsiveness

The Envision framework will provide a mechanism for clear coordination, communication, and a responsive organizational framework.

# **Draft Recommendation B: Funding for Operation and Maintenance of Stormwater Infrastructure**

**Recommendation:** Create a dedicated funding source for stormwater operation and maintenance (O&M) in the same way as for other utilities on campus

#### Easturas

- Recurring stormwater assessment based on square footage of impervious, including buildings, sidewalks, parking, driveways, and canopies
- Additional assessment for height unless energy dissipation is provided within the project footprint

#### Benefits:

- Provides a predictable budget for O&M
- Allows for planning of significant rehabilitation and improvement projects
- Tracking, budgeting and reporting allows for program management
- Data can be used to incorporate stormwater improvements to address resilience concerns into planned capital projects
- Provides funding for facilities staff dedicated to stormwater O&M

#### **Vision Elements**

#### **Environmental Conditions and Stormwater Management**

Funding O&M will allow the University to incorporate high-functioning green stormwater infrastructure, low impact development, and best management practices that beautify campus..

#### Recreation, Access and Accessibility, and Education

Funding O&M will minimize and control damage to passive recreation infrastructure and allow for improved use and access to facilities.

#### Conservation and Biodiversity

Funding O&M will increase the inspection and identification of stormwater issues and problems. Rapid identification of problem areas, and a funding sources for repairs will minimize and control damage to Conservation Areas.

#### Organizational Accountability, Collaboration, and Responsiveness

Successful management depends on assigned responsibility, dedicated staff, and funding that ensures necessary projects and upgrades can be made. Endorsement of an adaptive watershed management plan with dedicated, recurring funding acknowledges the ongoing nature of watershed stewardship.

#### **Draft Recommendation C: Stormwater Model Maintenance and Use**

**Recommendation:** Use the stormwater model to evaluate existing areas in need of improvement as well as the impacts of new projects

#### Features:

- The stormwater model needs continual updates to:
  - Refine the data used to represent the existing conditions
  - Investigate causes and solutions for localized flooding issues
  - Incorporate as-built data from all projects

#### **Benefits:**

- Collaboration tool to strengthen communication and partnerships to invest funds to improve the stormwater system as part of capital projects
- Identify cause and cost-effective solutions to localized flooding issues
- Check predicted performance versus observations during O&M

#### **Vision Elements**

#### **Environmental Conditions and Stormwater Management**

Using a model to review proposed projects will allow UF to identify opportunities to incorporate green stormwater infrastructure, low impact development, and best management practices to reduce flooding, erosion, and sedimentation.

#### Recreation, Access and Accessibility, and Education

Using the stormwater model will assist UF to identify and predict impacts impacts to recreational features which are in proximity to green infrastructure.

#### **Conservation and Biodiversity**

Much of the existing stormwater problems on campus occur in the Conservation Areas. Stormwater modeling can be used to identify the causes of damage in Conservation Areas and to evaluate potential fixes.

#### Organizational Accountability, Collaboration, and Responsiveness

Keeping an updated stormwater model will allow UF to share up-to-date information that will be of use for planning, design, construction, and for stormwater operation and maintenance including grounds.

# **Draft Recommendation D: Updating and Refining Operation and Maintenance Information**

**Recommendation:** Use AIMS document operation and maintenance procedures.

#### Features:

- Using AIMS to document procedures will improve budgeting and help to identify capital and labor needs
- Items to track:
  - Maintenance frequency
  - o Sediment volume removed or fill volume
  - o Trash removed
  - o Equipment used/ needed
  - Safety procedures
  - o Labor hours

#### Benefits:

- Collect data needed to evaluate performance of the stormwater system
- Identify infrastructure needs
- Collaboration tool to strengthen communication and partnerships to invest funds to improve the stormwater system as part of capital projects

#### **Vision Elements**

#### **Environmental Conditions and Stormwater Management**

Recording O&M issues and procedure allows UF to refine design standards for future green stormwater infrastructure, low impact development, and best management practices to reduce flooding, erosion, and sedimentation.

#### Recreation, Access and Accessibility, and Education

Tracking O&M issues and procedures will help to ensure functional infrastructure that provides access and accessibility, as well as recreation opportunities.

#### **Conservation and Biodiversity**

Necessary stormwater O&M will ensure that Conservation Areas are not continually impacted by stormwater runoff. Additionally, O&M should include vegetative maintenance consistent with the CALM Plan.

#### Organizational Accountability, Collaboration, and Responsiveness

Robust O&M data will allow UF to share up-to-date information that will be of use for planning, design, construction, and implementation of stormwater improvements.

## **Draft Recommendation E: Water Quality and Peak Rate Reduction Goals**

**Recommendation:** Incorporate water quality and peak rate reduction goals into all new construction and renovation projects

#### Features:

- Lake Alice is listed as an impaired waterbody
- Upcoming changes to the Florida Stormwater Rules will require UF to provide:
  - New Projects
    - Total Nitrogen
      - Greater of: Post ≤ Pre or 80% reduction
    - Total Phosphorus
      - Greater of: Post ≤ Pre or 95% reduction
  - o Redevelopment Projects
    - Total Nitrogen
      - 45% reduction
    - Total Phosphorus
      - 80% reduction
- All projects should incorporate energy dissipation before daylighting to green infrastructure

#### **Vision Elements**

#### **Environmental Conditions and Stormwater Management**

Incorporation of green stormwater infrastructure, low impact development, and best management practices will reduce flooding, erosion, and sedimentation that impacts the University's assets and the natural environment.

#### Recreation, Access and Accessibility, and Education

Improved stormwater management will enhance Lake Alice and the Conservation Areas. These ecologically diverse communities provide a living laboratory for education and recreational spaces for students to experience natural settings.

#### **Conservation and Biodiversity**

The extensive natural areas on campus are an integral part of the University and community experience. The protection and enhancement of these areas are essential to foster biodiversity, protect wildlife habitats, and expand connectivity.

#### Organizational Accountability, Collaboration, and Responsiveness

Endorsement of an adaptive watershed management plan with dedicated, recurring funding acknowledges the ongoing nature of watershed stewardship.

The PT and implementers self-selected into recommendation teams to provide feedback on the strengths, weaknesses, challenges, and opportunities (SWCO) for each of the recommendations. Once completed the teams underlined or starred significant items from their team's poster to report out to the entire group.

Draft Recommendation A: Project Planning for Sustainable Infrastructure	
Strengths	Weaknesses
Consistency and transparency Commitment and incentivizing doing the right thing Unbiased 3rd party system Looks beyond project boundaries	3rd party system: how to customize to our needs Potential that end project doesn't meet expected design standards
Challenges	Opportunities
Up cost in projects - does it return to ROI Does it duplicate any current processes Who is responsible/accountable	Better integrate buildings with infrastructure and open space Look beyond boundaries of project site Early budgetary and planning

Draft Recommendation B: Funding for Operation and Maintenance of Stormwater Infrastructure	
Strengths	Weaknesses
Upfront knowledge of recurring costs	For existing buildings site limitations-for costs
Challenges Opportunities	
*Determine fee structure	*Use of existing green space

Ownership and use of fee	Decreased maintenance?
	Teaching by example

Draft Recommendation C: Stormwater Model Maintenance and Use	
Strengths	Weaknesses
Improved site analysis *Predicts future impacts	Incomplete/inaccurate data *Lack of plan for implementation into current processes
Challenges	Opportunities
*Model interpretation for non-experts Staff requirements or need to contract out	Informed decision making *Future planning

Draft Recommendation D: Updating and Refining Operation and Maintenance Information	
Strengths	Weaknesses
*Large opportunity for transparency and good data Ability to answer questions quickly Avoid management oversights	*User adoption Use and management Resourcing as scale use
Challenges	Opportunities
*Integration of data between systems Access to maintenance info from outside Facility Services	Open system access to other entities System efficiencies *Catalog relative implementation of stormwater infrastructure Avoid management oversights

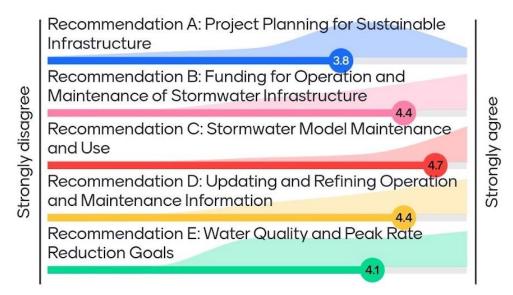
Draft Recommendation E: Water Quality and Peak Rate Reduction Goals	
Strengths	Weaknesses
Collecting important data *Encourage infiltration and water storage	*Consider loopholes - poor assumptions during modeling Difficult to implement on construction projects
Challenges	Opportunities
	Opportunities

The group was asked to provide their level of agreement with each recommendation using a scale from 1 to 5 as shown below. The level of agreement was collected using Mentimeter, an online survey tool. Thirteen out of fourteen attendees completed the survey.

### Level of Agreement Scale

1	Strongly disagree - Don't support at all
2	Slightly disagree - Don't like but will support
3	Somewhat agree - Support with reservations
4	Agree - Support with a minor point of contention, good enough
5	Strongly agree - fully support

### PT and Implementers Initial Draft Recommendations Level of Agreement Results



## Additional Feedback from PT and Implementers

The group was asked to provide any additional feedback that they would like the CT to consider as they draft recommendations. Their feedback is shown below.

- Consider stormwater on construction sites to manage stormwater during construction
- Cultural practices on campus (mechanisms enforcing standards for contractors and holding vendors accountable)

## **Attendees of Feedback Workshops**

#### SC/PT Attendees

First Name	Last Name	Department	Title
Kaylee	aylee August Office of Sustainability		Sustainable Program Coordinator

First Name	Last Name	Department	Title
Eban	Bean	Ag. and Biological Eng Center for Land Use Efficiency	Assistant Professor and Extension Specialist, Urban Water Resources Engineering
Mark	Brenner	Geological Sciences – Land use and Environmental Change Institute	Professor of Geology
Mark	Clark	Soil, Water, and Ecosystem Sciences	Assistant Professor, Wetland Ecology
Linda	Dixon	Planning, Design, and Construction	Director of Planning
Jared	Howard	Facility Services-Thermal Systems & Reclaimed Water Distribution	Waste Water Treatment Superintendent
Chuck	Kammin	Facility Services - Electrical and Water Distribution	Director Electrical Distribution
Rachel	Rachel Mandell Planning, Design, and Construction		Senior Campus Planner
Tom	Tom Schlick Facility Services-Grounds & Natural Resources		Director
Bill	Smith	University Athletic Association	Assistant Athletic Director of Facilities
Taylor	forest, Fisheries, and Geomatic Sciences		Professor, Ecotourism, and Graduate Coordinator
Amanda	Subalusky	Department of Biology	Assistant Professor, Center for African Studies
Kim	Tanzer	Community representative/Faculty Emeritus (Architecture)	Former UF Architecture Professor

## PT/Implementers Attendees

First Name	Last Name	Department	Title
Kaylee	August	Office of Sustainability	Sustainable Program Coordinator
Jordan	Benton	Facility Services	Assistant Director of Business Operations
Chris	Carlson	EH&S	Associate Director of Facility Support
Ronnie	Ronnie Cooper IFAS Director of UF/IFAS Facilities If Operations		Director of UF/IFAS Facilities Planning & Operations
Marty	Dempsey	Recreational Sports (Student Life)	Senior Associate Director for Facilities and Operations
Linda	Dixon	Planning, Design, and Construction	Director of Planning
Matt	Doty	EH&S	HazMat Program Director

Laura	Hall	Rec Sports	Senior Director
Jared	Howard	Facility Services	Waste Water Treatment Superintendent
Chuck	Kammin	Facility Services - Electrical and Water Distribution	Director Electrical Distribution
Rachel	Mandell	Planning, Design, and Construction	Senior Campus Planner
Tom	Schlick	Facility Services	Director of Grounds & Natural Resources
Bill	Smith	UAA	Assistant Athletics Director of Facilities
Dustin	Stephany	Planning, Design & Constructions	Sustainable Building Coordinator

## Consultant Team Attendees

First Name	Last Name	Organization	Project Role
Scott	Knight	WSI	Project Manager
Amy	Goodden	WSI	Data Analysis
Austin	Wood	Jones Edmunds	Stormwater Modeling

## Engagement Team Attendees

First Name	First Name Last Name Organization Project Role				
Jess	Stempien	Rooted in Process	Facilitation Lead		
Dawn	Newman	Blackhawk Facilitation	Co-facilitator		

## Workshop Pictures











## SC/PT Recommendations Feedback: Final Meeting

#### Overview

The PT and SC met via Zoom on April 9, 2024, to provide feedback to the revised draft recommendations at their final meeting together for this phase of the WMP. The purpose of the meeting was to clarify information related to the revised draft recommendations and to determine the level of agreement with each of the revised recommendations using Mentimeter. There were nine SC members out of twenty-eight that attended the meeting along with six PT members.

The CT provided a presentation on the following projects and recommendations.

- Projects:
  - Critical
  - Near-term, and
  - Medium and long-term projects.
- Recommendations:
  - Water quality source control
  - Design and review,
  - Operation and maintenance,
  - Funding mechanisms,
  - Data collection,
  - o TMDL development, and
  - Vegetation management.

Below are the results from the Mentimeter polls that were provided to participants. Not all recommendations presented were followed up by a Mentimeter poll.

For critical, near-term, and medium/long-term stormwater project recommendations, the CT presented information and clarified questions before participants responded to the Mentimeter poll. Below is the poll related to this information. Fifteen people responded to the poll.

Poll results for Section 3.2: Stormwater Project Recommendations



In relation to stormwater project recommendations, a participant had the following comment, "Good communication during the first project(s) will help mitigate concerns about later projects. Maybe a live cam during the demolition and construction, from a fixed point? And with explanations about the need for the steps of the project."

For water quality source control recommendations, the CT presented information and clarified questions before participants responded to the Mentimeter poll. Below is the poll related to this information. Eleven people responded to the poll.

Poll results for Section 3.3: Water Quality Source Control Recommendations



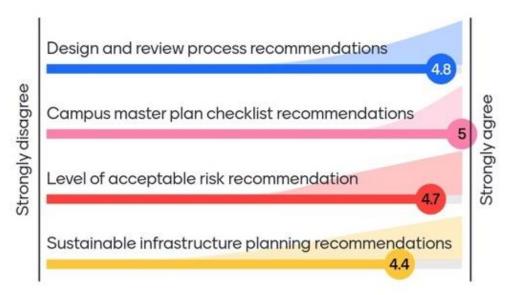
In relation to water quality source control recommendations a participant had the following comment, "For documenting communication: I recommend that UF consider voluntarily following Alachua County's Fertilizer and Irrigation Restrictions. I also think there is the opportunity to cap irrigation on existing vegetation and/or to reduce run times and days of week."

For design and review recommendations, the CT presented information and clarified questions before participants responded to the Mentimeter polls. Below is the poll related to this information. Nine people responded to both polls.

Poll results for Section 3.4: Design and Review Process Recommendations



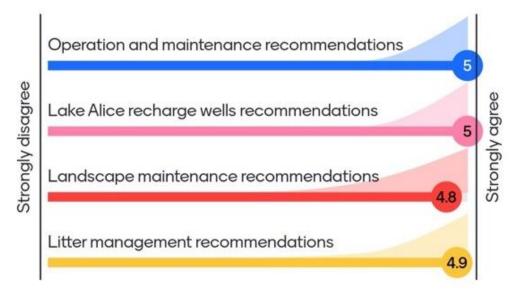
Poll results for Section 3.4: Design and Review Process Recommendations



In relation to design and review recommendations a participant had the following comment, "I wonder about requiring only 1-foot above flood stage for FFE, and the 100-year level (because it may not be high enough, even now.)"

For operation and maintenance recommendations, the CT presented information and clarified questions before participants responded to the Mentimeter poll. Below is the poll related to this information. Eleven people responded to the poll.

Poll results for Section 3.4.5: Operation and Maintenance Recommendations

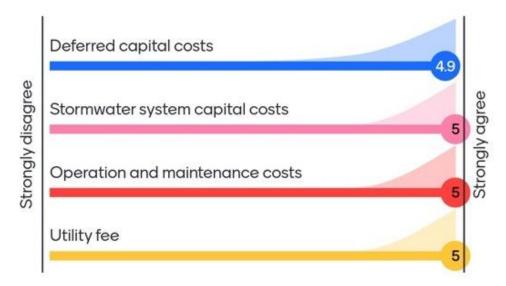


In relation to operation and maintenance recommendations participants had the following comments:

- "One of the things I have suggested for years is some dog waste stations as well."
- "In about 2008 the Gainesville Clean Water Partnership bought dog waste stations for most County and City Parks. It has helped reduce pet waste in these areas! We did the ones without trash cans since those take dedicated staff to empty on a regular basis. Building refill bags into annual budgets is pretty minimal."

For funding recommendations, the CT presented information and clarified questions before participants responded to the Mentimeter poll. Below is the poll related to this information. Eight people responded to the poll.

Poll results for Section 3.4.6: Funding Recommendations



For construction erosion and sediment control recommendations, the CT presented information and clarified questions before participants responded to the Mentimeter poll. Below is the poll related to this information. Ten people responded to the poll.

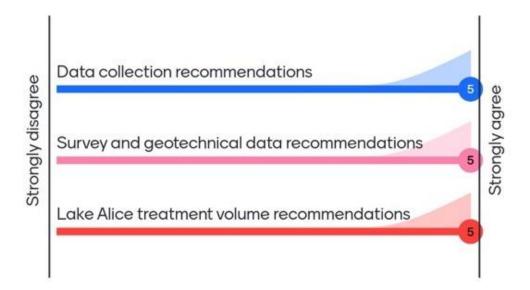
Poll results for Section 3.4.7: Construction Erosion and Sediment Control Recommendations



In relation to design and review recommendations a participant had the following comment, "If UF joined the Gainesville Clean Water Partnership, we could include E&S education and/or enforcement as part of the contract!".

For data collection recommendations, the CT presented information and clarified questions before participants responded to the Mentimeter poll. Below is the poll related to this information. Six people responded to the poll.

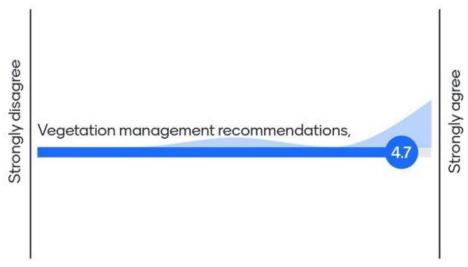
Poll results for Section 3.5: Data Collection Recommendations



In relation to data collection recommendations a participant had the following comment, "recommend integrating AI usage on data collection".

For vegetation management recommendations, the CT presented information and clarified questions before participants responded to the Mentimeter poll. Below is the poll related to this information. Seven people responded to the poll.

Poll results for Section 3.7: Vegetation Management Recommendations



As a closing to the meeting and project, the participants were asked, what did you appreciate the most about your time spent on this committee? The responses included:

- Getting to see many faculty experts share their expertise and knowledge!
- The project has been well organized, and information has been shared transparently. I've enjoyed learning from the range of experts.
- I appreciate that you included external stakeholders such as myself.
- This has been a great opportunity to provide feedback and discuss the challenging issues related to surface water quantity and quality on campus and I look forward to practical and innovative solutions as we move forward. We have come a considerable way so far, which is awesome!!!

## **Public Informational Workshops**

### Overview

Two public informational workshops were held to provide an opportunity for community stakeholders to learn about aspects of the Lake Alice Watershed Management Plan including the vision statements and a variety of recommendations for watershed management. The first workshop was held on April 25, 2024, in-person from 4:30 PM to 7:30 PM at the Straughn Center on campus. The second workshop was held on April 30, 2024, via Zoom from noon to 1:00 PM and required registration.

Four participants attended the in-person workshop. They represented a range of stakeholders from UF staff, residents, and students. The in-person workshop included a pre-recorded introductory presentation made by the CT to give an overview of the history of the Lake Alice watershed and highlight issues within the watershed. The workshop included six stations in which participants could visit on their own and interact with the CT. The stations and their description are listed below:

- Station 1: Participants were asked to answer the question on a sticky and post it on the wall, what is your connection to Lake Alice and the watershed?
- Station 2: Participants were asked to place a dot on the map in response to the question, what is your favorite place to visit in the Lake Alice watershed?
- Station 3: Participants were provided the vision statements for the Lake Alice watershed, and asked to write on a sticky their response to the question, which vision statement are you most excited about?
- Station 4: Participants were provided project concepts for the critical, near-term, and medium and long-term recommended projects and were able to discuss with the consultants to learn more.
- Station 5: Participants were provided written narrative for the operation and maintenance and funding recommendations and were able to discuss with consultants to learn more.
- Station 6: Participants were able to view the design and review recommendations and the stormwater model and discuss with consultants to learn more.

All participants at the in-person workshop were provided a handout describing the introductory presentation and stations. They were provided a link to a survey to provide any additional comments.

There were thirty-four registrants for the one-hour virtual public informational workshop, with thirty-two attending the workshop. Registrants represented a range of stakeholders, from UF staff and faculty, County and City officials, residents, students, and consultants. The virtual workshop format included a series of brief recommendation presentations followed question and answer sessions. Below is a list of the presentations:

- Lake Alice watershed introduction
- Stormwater project recommendations
- Planning, design, and construction recommendations
- Operation and maintenance recommendations
- Funding recommendations

All participants at the virtual workshop were provided an opportunity to provide additional comments via a survey.

## **Check-in Question Responses**

Participants were asked, what is your connection to Lake Alice and the watershed, as a check-in question. The responses from both the in-person and virtual participants are below:

- Agricultural & Biological Engineering Faculty
- Alice's Friends
- As a private property owner within the Lake Alice watershed and as an environmental engineer with an interest in overall water quality issues.
- Bat house lover
- Care about water quality
- CHW, an NV5 Company
- Childhood haunt
- Civil Engineer designing projects on campus
- Consultant Team and UF Grad
- Engineer with WSI, also a Gainesville resident who enjoys walking around Lake Alice
- Enjoy trees/bat house
- Florida-Friendly Landscaping Program
- Landscape Architecture Consultant with UF, Proud Gator
- Landscape Architecture Consultant with UF, 2x Gator Alumni and Gainesville native (ACR)
- Live in Golfview since 1988 and walk by its shores daily
- Pass by it daily.
- Project manager on behalf of UF
- Student gardens (gardener)
- UF Civil Consultant on numerous UF Major Projects
- UF Environmental Health & Safety
- UF Facilities Services we maintain all the stormwater infrastructure throughout the campus and enjoy walking Lake Alice and enjoying nature!
- UF Performing Arts (Baughman Center)
- UF Planning Design & Construction
- UF Office of Sustainability, I'm a part of the project team and love running/walking around Lake Alice.
- UF Water Utilities
- UF student
- UF Sustainability, long-term lover of the Lake and the wildlife around it.
- Urban and Recreational Green Infrastructure Coordinator for UF's Center for Landscape Conservation Planning. The center is part of the UF Department of Landscape Architecture, College of Design Construction and Planning. Also, a proud double Gator!

Participants were asked, which vision statement are you most excited about. The responses from both the in-person and virtual participants are below:

Vision Statement	Responses
Environmental Conditions and Stormwater Management Incorporation of green stormwater infrastructure, low impact development, and best management practices will reduce flooding, erosion, and sedimentation that impacts the University's assets and the natural environment. Telling the stormwater story while showcasing a commitment to innovation and excellence.	<ul><li>Most important</li><li>I select this one</li></ul>

Recreation,	Access and	l Accessibility	, and E	ducation
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Consistent connection to nature and recreational opportunities that further the University's academic mission and enhance well-being. Increasing accessibility, passive recreation, and intentional programming in and around these areas raises awareness and appreciation for the watershed and University while promoting natural discovery.

 This approach encompasses others too

### **Conservation and Biodiversity**

The protection and enhancement of natural areas are essential to foster biodiversity, protect wildlife habitats, and expand connectivity. Provide a living laboratory for outdoor learning and best management practices for urban stream ecology and wildlife movements.

 I care about stopping species loss

#### Organizational Accountability, Collaboration, and Responsiveness

Well-maintained buildings and a vibrant landscape that is functional and well-used. Clear coordination, communication, and a responsive organizational framework. Assigned responsibility and funding that ensures necessary projects and upgrades can be made. Endorsement of an adaptive watershed management plan with dedicated, recurring funding acknowledges the ongoing nature of watershed stewardship.

 Collaboration of all Divisions of UF are so important

## **Questions and Answers**

During the virtual public workshop, participants were given the opportunity to ask questions verbally or in the chat of Zoom. Below are the questions and responses provided by the CT. There were no questions received regarding the funding recommendations.

## Stormwater project recommendations

Questions	Answers	
When will the appendices be available for review?	A draft of the attachment reports will be available by the end of May. There are seven attachment reports (data, history and literature review, facilitation, vegetation, etc.).	
What is the timing of the St. Johns River Water Management District (SJRWMD) Master permit and the integration from this report?	The wastewater plant has an existing permit. The stormwater master permit for campus is currently under review. Historically, Lake Alice was the treatment system for everything within the 1,000-acre watershed. Currently, campus is still operating under the 2010 master permit that was previously issued by the SJRWMD.	
Has the watershed delineation of Lake Alice been updated with this study? Does it differ from City/County delineations?	The watershed delineation was updated as a part of this study based on the best available stormwater and topographic information, which included the City stormwater system as well as the campus stormwater system. One of the areas with more changes to the	

delineation was in the south area near Archer Road that has had a fair amount of construction since it was delineated. Several areas were also adjusted based on updated topographic information.

#### Additional comments from attendees

The Yulee Circle is missing. The road continues to the west from Cypress Hall.

## Planning, design, and construction recommendations

Questions	Answers
What would additional data collection provide?	Additional data will allow for evaluation of current conditions on Lake Alice and in the watershed. Having flows and level data combined with bathymetry allows for calculation of residence time of nutrients in the lake. Collection of water quality data with flows and levels would allow for development of a nutrient budget for the lake to assess the sources of nutrients and determine whether the Florida Department of Environmental Protection designates the lake as impaired for the nutrient, phosphorus. This might allow for development of an alternative management target for nutrients in the watershed. Data collection from sediments within the lake would provide information to determine if the lake should be dredged to address internal nutrient cycling.

## Operation and maintenance recommendations

Questions	Answers from Consultant Team/Project Team	
Since reclaimed irrigation is a way of disposing of treated wastewater, if the other disposal option is Lake Alice, and reclaimed irrigation is decreased, has there been consideration for alternative disposal options?	The goal is to use reclaimed water to meet the campus irrigation needs without relying on pumping "new" water from the aquifer. Properly managing reclaimed water irrigation is important to avoid direct runoff into streams and creeks. Increasing the quality of the reclaimed water by reducing the nutrients at the wastewater plant would reduce nutrient loads to the reclaimed water system and down the recharge well to the Upper Floridan Aquifer. This may involve a phosphorus upgrade at the plant.	
Will the plan be updated after issuance of the SJRWMD updated Master Plan? How about if a Total	In the new rules for the Clean Waterways Act the watershed management plan can be used to manage stormwater on campus. Once the Master Plan Permit is issued it will be updated with the new model and with the watershed management plan. This way the watershed management plan	

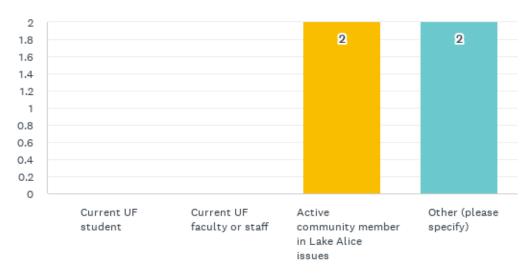
# Maximum Daily Load (TMDL) plan is created?

can become a management tool that is tied into the projects listed in the Master Plan Permit. We are recommending that the watershed management plan be updated as campus changes over time.

## Survey results

Participants were given the opportunity to provide feedback on the information provided to them at the public workshops via an online survey using Survey Monkey. The survey included four questions. In total, four people responded to the survey. The questions and responses are below.

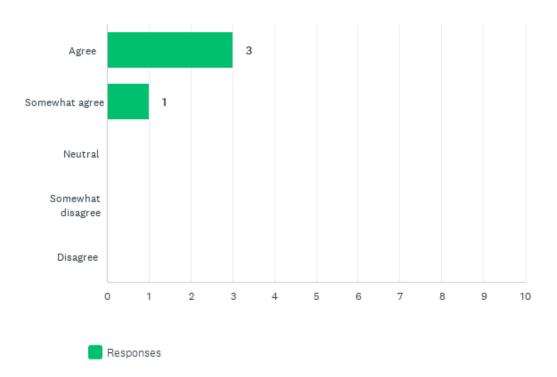
## What is your primary connection to Lake Alice or the watershed?



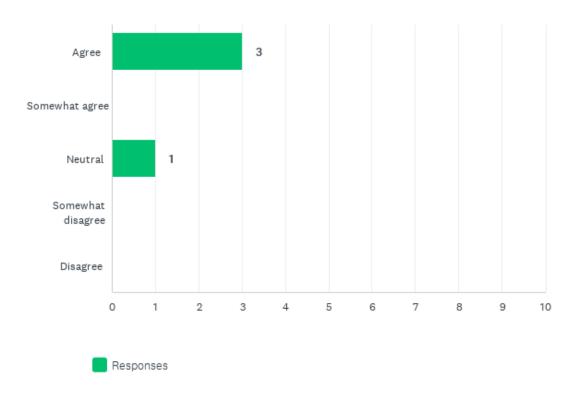
Responses for the "other" category included:

- Landscape Architecture Consultant
- City of Gainesville

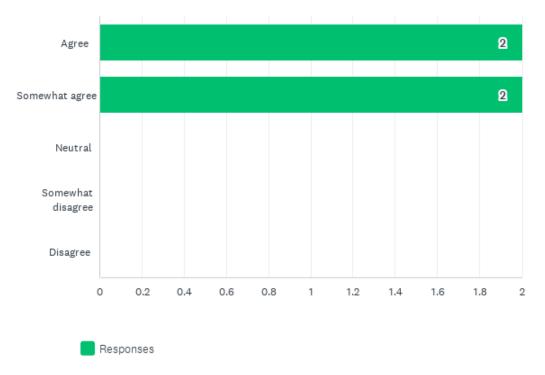
The information provided in the overview presentation was clear and easy to understand.



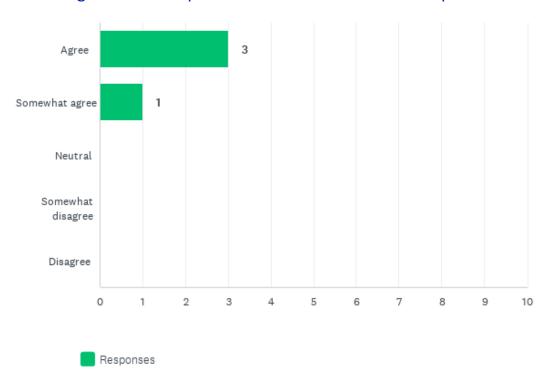
The critical, near-term, medium/long-term project recommendations will improve the watershed.



The operation and maintenance and funding recommendations will improve the watershed.



The design and review process recommendations will improve the watershed.



## How would you like to be involved in the future?



## **Recommendations for Engagement Next Steps**

As the UF Administration moves into the implementation phase of the WMP, the ET is recommending the University:

- continue to engage key community stakeholders, such as through an awareness campaign,
- develop a strategic plan for implementation using a participatory strategic planning process, and
- consider maintaining the SC and PT.

An awareness campaign could include items such as informational kiosks near project locations, social media campaigns, and maintaining the website with WMP updates and progress reports.

The Technology of Participation's (ToP®) participatory strategic planning process is an integrated approach to strategic planning. The plans are realistic, achievable, and easy to monitor. This method is useful with stakeholders with multiple perspectives.

Participatory strategic planning combines features of long-range, operational, and project planning and focuses on creating new initiatives in response to evolving trends in the external environment. Participatory strategic planning uses the whole range of experience and knowledge of the people around the table to identify a realistic vision, current underlying contradictions to the vision, innovative and substantial strategies, and implementation action steps.

The ToP® process has been developed over the last 60 years in communities all over the world. Its methodology is uniquely suited to leverage partnerships and collaborations to achieve

impact and action. The ToP® participatory strategic planning process<sup>4</sup> helps groups thin, talk, and work together by providing a facilitated structured process to:

- Recognize and honor contributions of all participants
- Deal with more data in less time
- Pool individual contributions into larger, more informative and inclusive patterns
- Use the multiple perspectives as an asset while minimizing polarization and conflict

The ToP® process helps to focus the strategic plan and starts with the creation of a focus questions. For example, how can the University of Florida work collaboratively with stakeholders to effectively and sustainably implement the Lake Alice Watershed Management Plan over the next five years? The next step is to conduct a participatory trends analysis, historical scan, or environmental assessment to help the group build a foundation of shared understanding of what might be impacting planning before launching into visioning. There are five ToP® strategic planning workshops as outlined in the table below, along with the workshop questions, who the participants should be, the workshop purpose and process, and the intended outcomes for each workshop.

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<sup>&</sup>lt;sup>4</sup> Institute of Cultural Affairs, ToP® Strategic Planning Manual, 1991-2005

## Strategic Planning at a Glance<sup>5</sup>

Phase	Questions	Participants	Purpose	Process	Outcomes
Context, Environmental Scan/Situation Assessment	What information do we need to know in order to plan effectively? What trends do we need to be aware of?	Those who need to get on the same page before planning	Build shared background and identify critical areas of attention	<ul> <li>Various Possibilities, including:</li> <li>Group review and analysis of existing data</li> <li>Surveying, interviewing, and focus groups</li> <li>Historical scan of the organization</li> <li>Trends analysis</li> </ul>	Shared understanding of the decision point  • Summary of key factors needing attention  • Strategic focus question
Practical Vision	What do we want to see in place in 5 years?	Those who need to be motivated or inspired to support the plan	Create a compelling vision for the end result	<ol> <li>Explore a range of possible futures for the organization</li> <li>Consolidate into several overarching elements of the vision all can support</li> </ol>	List of key elements of the vision.  "In 5 years, we hope to see"
Blocks & Contradictions	What is blocking us from realizing our vision?	Those who understand organizational challenges and/or play a role in them	Deep analysis of issues that have hindered organizational progress	<ol> <li>Thoughtful reflection about internal and external challenges</li> <li>Articulate root issues</li> </ol>	List of critical blocks.  "We have been blocked from moving towards our vision by"
Strategic Directions	What innovative, practical actions will address the blocks and move toward the vision?	Those who are familiar with the moving parts and can be creative with the spectrum of options/constraints	Identify long-term arenas of focus and action; develop and prioritize specific activities	<ol> <li>Prompt creative and comprehensive brainstorming on practical actions</li> <li>Identify high level arenas of action that the group can commit to</li> <li>Prioritize key strategic activities</li> </ol>	3-4 agreed-upon arenas of action with supporting initiatives  "In the next 5 years, we will address blocks and move towards our vision by"
Focused Implementation	What are our specific tasks, timelines, roles, and resources for the first year's activities?	Those who will own and do the work	Determine what will actually will be done, when, and by whom	<ol> <li>For each strategic direction, decide on success indicators and select 1st year initiatives</li> <li>Create an overall timeline of the year's work</li> <li>For each project in the first 90 days, identify specific tasks and assign roles and resources.</li> <li>Coordinate meetings, budget, and communication between each project group.</li> </ol>	Timeline of projects for the first year.  Specific implementation plans for first 90 days.

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<sup>&</sup>lt;sup>5</sup> Co-Creative Labs, ToP® Network Strategic Planning Resources, cocreativeomaha.com