

CITY OF AUSTIN

Lake Austin Task Force

2013 Report- Working Draft

This draft document provides the analyses and recommendations of the Lake Austin Task Force, a group created by the Austin City Council on May 24, 2012, to develop and report recommendations for changes relevant to Lake Austin. (Ordinance No. 20120524-083)

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Introduction

Lake Austin is one of the most valuable community assets of the City of Austin and is a significant source of pride and attraction. Not only does it provide drinking water for the City of Austin as well as for many riparian households and the Municipal Utility Districts, but it also provides superior recreation and boating opportunities for citizens and visitors. The Lake Austin Ordinance of the 1980's acknowledged the vulnerability of the narrow, shallow lake and stressed the importance of protecting the lake and its environment to promote Austin's economic well-being. The Ordinance predicted that if the Lake Austin Watershed is not developed in a sensitive and innovative manner, the recreational benefits will be irreparably damaged.

Development and recreation pressures along the shores of the lake have been steadily increasing since the original Lake Austin Ordinance and are anticipated to continue to increase. Residents of the Lake Austin area have brought forward health and safety concerns such as periodic proliferation of Hydrilla, erosion of the Lake Austin shoreline, adequacy of wastewater treatment, rainfall runoff into the lake, adequacy of current ordinances and the enforcement thereof. There are also concerns that the increasing size and number of watercraft on Lake Austin compounded by new activities such as wakeboarding, and wake surfing may be contributing to an increasing intensity of wave energy within the lake and along the shoreline.

Key findings from the 2009 EPA National Lakes Assessment indicate similar concerns for lakes nationwide. These findings report that poor lakeshore habitat is the biggest problem in the nation's lakes and that high nutrient levels are the second biggest problem. The assessment suggests that "managers, residents, businesses, and community leaders should work together and enhance their efforts to preserve, protect, and restore their lakes and the natural environment surrounding them." Consistent with this idea, and in the spirit of supporting public interest of the emerging issues in the Lake Austin watershed, in 2010 the Waterfront Planning Advisory Board and the Parks and Recreation Board (PARB) passed resolutions requesting the Austin City Council to assemble a multidisciplinary team to tackle the many concerns of Lake Austin and recommend methods and policies that would provide for reasonable use of Lake Austin while also protecting the resource.

Purpose

On May 24, 2012 the City Council approved Ordinance 20120524-083 which created the Lake Austin Task Force (LATF). This ordinance was passed in response to resolutions of both the Waterfront Planning Advisory Board (WPAB) and PARB under growing public concern for the health and function of the lake. In addition to limiting administrative variances and assigning the Planning Commission as the land use commission for variances within 500ft of the Lake, the ordinance directed the City Manager to work with the LATF to develop and report recommendations for changes relevant to Lake Austin.

The composition of the LATF includes: seven regular members from residents of the neighborhoods adjacent to and surrounding Lake Austin, seven regular members appointed on the basis of knowledge or expertise in related subject matter, and three ex-officio, voting members of the PARB, Environmental Board, and Water and Wastewater Commission. Review by the LATF and any subsequent recommendations will be intended to provide use and

management of the lake and shoreline that is protective of public safety, the environment, property rights, and provides for the use and enjoyment of Lake Austin by all. The LATF will expire either upon completion of its assigned task or one year after the effective date.

LATF Scope

As provided for by the enabling ordinance, the scope of work for the Task Force will be to consider and make recommendations regarding:

- Development that impacts Lake Austin watershed. This will include any and all temporary and permanent structures, including homes, businesses, docks, marinas, and public facilities.
- Lake use and management, including; recreational, commercial, and public use on and adjacent to the lake.
- Protection of the environment within the Lake Austin watershed, including but not limited to; water quality, shoreline erosion and stability, and invasive flora and fauna.
- Processes, policies, and coordination between entities with jurisdiction over Lake Austin, including, but not limited to; the City of Austin, LCRA, and Texas Parks and Wildlife.

LATF Members

Nick Wiersema Place 1 Appointee	Kenneth Pfluger Place 1 Appointee	Ellen Witt Place 2 Appointee	Mary Ann Neely Place 2 Appointee
Carol Lee Place 3 Appointee	Vacant Place 3 Appointee	Dr. Ben Hodges Place 4 Appointee	Pam Murfin Place 4 Appointee
Dr. Ernest Gonzalez Place 5 Appointee	Jared Matthews Place 5 Appointee	Linda Guerrero Place 6 Appointee	Alan Roddy Place 6 Appointee
Jane Rivera Parks & Recreation Board	James Schissler, P. E. Environmental Board	William Moriarty Water & Wastewater Commission	Eric Moreland Mayor's Appointee
Brian Roark Mayor's Appointee			

LATF Work Groups and Decision Making Process

The Task Force identified a list of 62 potential issues (including duplicates). Each item was assigned to one of four categories:

Lake Use and Management

Water Quality and Environmental Issues

Development, Regulations and Compliance Issues

Processes, Policies and Coordination Issues

Three Work Groups were formed on October 22, 2012 with five Task Force members in each group.

Water Quality and Environmental Issues

Ben Hodges

William Moriarty

Pam Murfin

Mary Ann Neely

Nick Wiersema – Chair

Lake Use and Management Issues

Ernest Gonzalez

Kenneth Pfluger

Brian Roark

Alan Roddy

Ellen Witt – Chair

Development Regulations and Compliance Issues

Andrew Hawkins (resigned)

Jared Matthews

Eric Moreland

Jane Rivera

Jim Schissler – Chair

Each Work Group was asked to prioritize and analyze the issues within their category, using a form shown in Appendix C. Work Groups created reports on the top three to five priority issues in their category using a template (Appendix D) that included a problem analysis, cause analysis and remedy analysis. When a consensus Work Group report was created, it is included in this document. The timeframes for this work were as follows:

May 24, 2012 – Austin City Council creates Lake Austin Task Force by Ordinance No. 20120524-083

August 20, 2012 – First meeting of the LATF

October 15, 2012 – Staff led boat tour of Lake Austin for LATF and stakeholders

October 22, 2012 – LATF Work Groups created

October 22, 2012 – Public Meeting No. 1

October 22, 2012 thru March 11, 2013 – LATF Work Group meetings

March 18, 2013 thru May 13, 2013 – LATF consideration of possible recommendations

May 20, 2013 – Public Meeting No. 2

June 4, 2013 – LATF expiration date

Some issues discussed by the Task Force do not have a Work Group report included in this document because that issue was not assigned to a Work Group, the Work Group ran out of time, or there wasn't agreement among the Work Group members.

The Task Force made decisions on recommendations by consensus, i.e. the agreement of all members present for that discussion. The process they used was collaborative problem solving. In collaborative problem solving, the group first identifies the interests of all the stakeholders. Interests are the unmet needs or goals. They then, literally, brainstorm all possible options, even those that might not have any support. After the brainstorming, the group evaluates the options to determine which options best meet the variety of interests. Those options that seemed to meet a wide range of interests and on which the group could all agree became consensus recommendations.

In the sections that follow, a Work Group report is included when one exists. A table lists all the stakeholder interests identified for each topic and the consensus recommendations. Other options for that topic that were generated during the brainstorming but failed to reach consensus are shown after the table. Please note that the brainstormed options include some that had very strong support but not consensus, as well as others that had very little support.

Summary of All Consensus Recommendations

Hydrilla/Aquatic Vegetation

The Task Force believes that Asian Grass Carp are the main keystone, dependable solution to the Hydrilla problem. They are not the exclusive control option. They have examined and ruled out some possible lake-wide treatment options by the City of Austin including systematic mowing, chemical treatments, pulling it up by the roots, and completely draining the lake and pulling it up.

H1. Update the Lake Austin Hydrilla Management Plan to be consistent with the current state of science regarding aquatic macrophyte management, the specific process for determining Asian Grass Carp stocking rates, and applicability with current state and federal water quality standards.

H2. Document in the Hydrilla Management Plan and continue the iterative, proactive, adaptive process for determining Asian Grass Carp stocking rates. Increase the current stocking rate to 55.5%. Also improve the purchasing process to allow staff to react more quickly and be more nimble when spikes in Hydrilla growth occur.

H3. Ask all agency partners (list key ones) to budget funds for grass carp purchase.

Sound/Noise

SN1. Direct law enforcement officers patrolling the lake to provide more consistent enforcement of the existing sound ordinances applicable to water craft. (Note: This will apply to both amplified sound and engine/exhaust noise.)

SN2. Simplify the process for getting APD boats repaired, so that APD is not chronically short of boats for Lake enforcement. (This currently happens under Fleet Services.)

SN3. Add to the existing law enforcement database, a database that allows officers to track violators of the sound ordinance on the lake.

Water Quality & Monitoring

WQ1. Consolidate and coordinate in lake planning and monitoring programs amongst stakeholders and involved agencies (such as LCRA, TCEQ, etc.) with increased data sharing and provide easy access for the public to this information

WQ2. Develop a Historical Data Review for Lake Austin, to identify data gaps and needs and an annual Lake Austin Report, presenting monitoring methods, data collected and analysis procedures.

WQ3. Within three years, conduct research to determine, with the best scientific knowledge, the causes of blue-green algae blooms on the lake.

WQ4. Consider establishing, either on the staff or department level, a group whose sole responsibility is management of the entire Lake Austin watershed.

WQ5. As a policy recommendation, the City should upgrade its standards for on-site septic facilities.

Erosion

E1. Develop a process for creating navigation zones to limit erosion.

E2. Support stream and creek bank stabilization and restoration and education about these issues.

Commercial Activities

CA1. Develop and maintain a data bank of commercial users of the Lake and adjacent Lake shores.

CA2. Investigate possible locations for a second gas fueling station and additional sewage pumping facilities, considering environmental impacts as well as other factors.

CA3. Conduct a feasibility study of possible commercial operations such as canoe, kayak, paddleboard rentals at Emma Long Park or other locations.

CA4. Provide for boat launching fees at public ramps and employ attendants to collect the fees.

CA5. Utilize funding sources such as Parks and Wildlife's Paddling Trails program or LCRA's Colorado River Trails program to increase recreational opportunities.

CA6. Research possible public-private partnerships, or other funding strategies, for construction of new concessions and/or City facilities.

CA7. Improve public boat ramps and parking, especially at Walsh.

CA8. Establish a licensing system and process for commercial users of the lake with appropriate fees and oversight.

Funding

F1. Create a Master Plan for the Lake. For example, identify long-term and short-term projects. Long-term projects might be funded through bonds.

F2. Establish license fees for commercial use of the Lake.

F3. Establish launching fees, with the funds going to Lake management.

F4. Get a commitment from other agencies, such as LCRA, to fund Lake-related activities.

F5. Dedicate all lake usage fees to Lake-related expenses.

F6. Work with Travis County to ensure that any existing residential shoreline tax be applied to Lake Austin maintenance and operation. *(The group will verify whether such a tax exists and clarify this recommendation on June 3rd.)*

F7. Investigate the possibility of establishing license fees for private docks on public land.

F8. Dedicate a particular amount of City of Austin general funds coming from property taxes on properties in the Lake Austin watershed to Lake Austin-specific uses.

Traffic

T1. Collect a fee for launching at the City of Austin public ramps. Revenue should be dedicated to Lake Austin needs, such as maintaining boat ramps, improving boat ramp trailer parking areas, converting vertical bulkheads and dealing with invasive species.

T2. Enforce parking restrictions at City of Austin public ramps. Encourage Travis County to enforce parking at Loop 360 boat ramps, including the illegal parking along the shoulders of Loop 360.

T3. Collect a fee for launching at the public ramps that would be used to employ an attendant at the ramps.

T4. Special attention is needed at Emma Long Park to keep swimmers inside of the swim areas. More buoys may need to be added along the shoreline of the camping area to separate boat traffic and campers.

T5. Establish a no-wake zone up to 50 feet of the shoreline for the entire lake.

Boat Dock and Bulkhead Issues – 50% Rule

BDB1. Create a required boat dock registration process such that if the dock is registered within a certain number of years of the establishment of the registry, it qualifies as a legal, noncompliant dock in perpetuity as long as the horizontal and vertical footprint is not expanded. Registration would require a photo and drawing illustrating the dock location and size and include a \$50-\$75 fee. The fee would be used to support staff to do the work and verify the data. Use information that is already in the files. If your dock was built after 1974, it must have a permit. If your dock was built after that date and has no permit, it is illegal.

BDB2. Allow only up to 25% of the horizontal length of a bulkhead to be repaired using a site plan exemption. This exemption should not be repeated within a 3-year period.

BDB3. Modification, maintenance, repair, replacement or reinforcement of boat docks under a site plan exemption (SPE) should be limited to non-structural changes to existing components. Allowed work under an SPE may include repair or replacement of the existing decking, railing, roofing etc. The following changes are NOT allowed:

- Changes to structural components (load bearing beams or walls, piers, roof structural components, etc.
- no additional walls (load bearing or not)
- no additional height, width or depth
- for legal, non-complying structures, nothing that increases non-compliance.

BDB4. Code should be changed to require a pre-construction meeting with Environmental Inspector prior to work commencing under an SPE. All other boat dock remodeling should require a site plan with associated drawings, pre-construction meeting and inspections.

Boat Dock ID Tags and Other Boat Dock Issues

BD1. Allow the City to decide how the tag requirement will be implemented as part of the boat dock registration process. City should consider using mile markers from the dam rather than street addresses dock identification.

BD2. City staff should:

- a. Update and modernize the Code relating to boat docks.
- b. Review how terms are defined so that they are clear, consistent and workable.
- c. Address the following issues identified by the Task Force:
 - i. *Definition of “boat lifts”*
 - ii. *Question of height (limits)*
 - iii. *Requirements for marinas may not make sense, e.g. parking requirements.*
 - iv. *Address issues relating to the fact that not all docks are linked to residences.*
 - v. *Several issues of clarity around Article 13 such as the definition of a dock, the need to update to include newer technologies such as solar power and the definition of a permanent structure*
- d. Provide opportunities for public involvement in these code changes.

Variances

V1. Specific to §25-8 variances: leave the code as it was changed in May 2012 except make Zoning and Platting Commission the approval body. (That is, no administrative approvals, requests go to the Environmental Board for advisory purposes, then to Zoning and Platting for final review and decision.)

V2. The Task Force believes that the Parks and Recreation Board is not the appropriate venue for variance approvals. These requests should go to a more appropriate Board. City staff should consider deeply, in conversation with other relevant groups, who is the most appropriate Board to approve variances. The Task Force is not necessarily asking for a new Board to be created. The Task Force encourages a process that uses findings of fact.

Public Education and Outreach

PEO1. Ask the Environmental Education group in Watershed Protection to focus public education and outreach efforts towards homeowners in the Lake Austin watershed on topics including: best environmental practices for erosion, bulkheads, fertilizers, stream bank restoration, public safety and flood protection.

PEO2. Create an Advisory group, similar to the Lady Bird Lake Advisory group, for Lake Austin.

Coordination

C1. City Law needs to identify or cultivate one or more resource persons who have appropriate knowledge and experience in navigation stream law and Federal and State

water codes to advise staff and the Boards/Commissions and City Council on policies and decisions related to managing the Lake.

C2. Establish a Lake Management Division with a cross-functional team led by a Director with lake management experience to provide comprehensive oversight of all the policies and procedures that affect the Lake Austin watershed. This Division would include planning, regulation and oversight of facilities and commercial uses along and within the lake, development within the watershed boundary, and managing recreational use.

C3. Consider consolidating the functions of the Board of Adjustment and the Zoning and Platting Commission to have one Board/Commission that uses appropriate Findings of Fact for considering variances to all regulations that affect the Lake Austin watershed. In the interim:

- All requests for variances from LDC 25-2 Use and Development and Article 13 Docks, Bulkheads and Shoreline Access should be determined by the Board of Adjustment (currently some requests go to the Parks and Recreation Board.)
- All requests for zoning or rezoning within the Lake Austin Watershed are reviewed by the Zoning and Platting Commission, which makes a recommendation to the City Council (as currently done.)
- All requests for variances from the environmental regulations, including CEF protections, shoreline relocation, lake fill, and construction on slopes are reviewed by the Environmental Board, which makes a recommendation to the Zoning and Platting Commission. Decisions of the ZAP may be appealed to the City Council (currently some requests go to PARB and some to the BoA).

C4. Have an educational component to this process.

Boat Lift Remodeling

BLR1. Treat stand-alone boat lifts like boat docks.

Marine Toilet Regulation

MT1. Direct the City Manager to immediately identify and have the health authority referenced by LDC 6-5-26 inspect all watercraft that have marine toilets to ensure that waste cannot be directly discharged into the water (i.e. any “Y” valve are secured in the closed position by padlock, non-resealable ties, removal of handle or other physical barrier). Have the City Manager clearly identify how to report violations and to whom.

MT2. Require commercial watercraft operators to provide proof of compliance with the Texas Party Boat Operator Licensing Program and the TCEQ MSD Certification program prior to issuing or renewing a license to operate on Lake Austin.

MT3. Direct the City Manager to apply for a TPWD Boating Access and Boat Sewage Pump-out Grant of up to \$500,000 by the application deadline of October 31, 2013

(<http://www.tpdw.state.tx.us/business/grants/trpa/>) for the purpose of providing additional and improved boat ramp and boat sewage pump-out stations for watercraft operating on Lake Austin.

MT4. Request the Water and Wastewater Commission follow-up on this issue and help ensure that watercraft with marine toilets operating within the city jurisdiction are inspected by the City and that adequate sewage pump-out stations are provided on both Lake Austin and Lady Bird Lake.

MT5. Update and improve the pump-out station at Walsh.

MT6. Consider creating a second pump-out station on Lake Austin.

MT7. Tie the pump-out station to the RV pump-out at Emma Long Park.

Work Group Analyses by Issue

This section includes, for each issue of the 16 issues discussed by the full Task Force:

- the Work Group report, when one exists,
- the identified stakeholder interests,
- the consensus recommendations and
- the entire list of brainstormed options.

Please note that the brainstormed options include some that had very strong support but not consensus, as well as others that had very little support.

Issue: Hydrilla and Aquatic Weeds

Work Group Report

Lake Austin has been clogged by thick strands of Hydrilla and Milfoil (both known as aquatic macrophytes) on and off for the last 10+ years. For the last 2 years, the upper end of the lake has had the most severe infestation of invasive macrophytes experienced to date. Prior to 1999, all macrophyte management activities on the Lake were focused on Milfoil, including the seasonal lowering of the lake.

- Are the current management program components effective and what effect(s) do these non-native invasive macrophytes have on Lake Austin's ecosystem?
- Does the stocking of non-native Asian Grass Carp have discernible effect(s), positive or negative, on Lake Austin's ecosystem?

Problem Analysis

- Excessive macrophyte growth causes, has caused, or may cause the following problems:
 - It reduces the accessibility of the lake for all users.
 - It likely contributed to or was a major factor in a drowning death on Lake Austin in November 2001.
 - It causes erratic driving among boat drivers, as they must often swerve dramatically to avoid hitting a mat of Hydrilla.
 - It has, in 2002, slowed flood waters causing them to spill over Lake Austin's banks, flooding homes, damaging docks, shoreline armament, uprooting trees and exacerbated shoreline erosion and mass wasting.
 - It has caused \$500K+ damage to the power generation equipment and power loss due to shut downs at Tom Miller dam due to large mats of macrophytes ripped from the lake's channel floor during high flow conditions.
 - It can have an impact on dissolved oxygen, pH and temperature, which has a direct effect on the aquatic ecosystem.
 - It, excessive (over 30% coverage) macrophyte growth, including but not limited to Hydrilla and Milfoil is believed to negatively impact fisheries.
- The dominance of Hydrilla and Milfoil in the lake at the expense of other more beneficial macrophytes alters the ecosystem and can have a negative impact on aquatic species diversity and abundance.
- Hydrilla and Milfoil may provide a sink for nutrients and stabilize bedded sediments, masking the effect of other water quality impacts.

Cause Analysis

- Review of semi-quantitatively estimates of macrophyte coverage including Hydrilla and Milfoil over the last 14 years as measured by TPWD staff.
- Review of the City of Austin's Lake Austin Hydrilla Management Plan drafted in 2000.
- Consideration of citizen testimony, the [overwhelming] majority of which, cited Hydrilla or 'weeds' as the most significant problem for Lake Austin.
- The entire Lake Austin Task Force has received a presentation and question and answer sessions with City of Austin staff and Texas Parks and Wildlife staff regarding aquatic macrophyte management.
- Review of management program histories, successes and failures, and applicability for other water bodies. The current City of Austin protocol for the reduction of Hydrilla overgrowth is to attempt to maintain, through regular stockings, a 50:1 ratio of Asian Grass Carp per acre of Hydrilla. Measurements of Hydrilla coverage in the lake occur twice a year (Spring and Fall), although more frequent measurements have occurred in the past.

Remedy Analysis

It is recommended that the following remedies be considered:

- Update the *Lake Austin Hydrilla Management Plan* to be consistent with the current state of science regarding aquatic macrophyte management, the specific process for determining Asian Grass Carp stocking rates, costs, and applicability with current state and federal water quality standards.
- Development of a proactive and predictive process for determining Asian Grass Carp stocking rates, as opposed to the current process solely based on macrophyte coverage estimates.
- Increase the frequency of macrophyte coverage surveys that are conducted in conjunction with the Texas Parks and Wildlife Department and adjust stocking rates accordingly.
- Continue to work with the LCRA in supporting seasonal water volume draw-downs in the lake.

Interests Considered and Consensus Options for Hydrilla/Aquatic Weeds

Interests (Unmet Needs)	Options that Achieved Consensus
<ul style="list-style-type: none"> • Prevent damage to assets and property, including erosion • Safety for recreational users • Safety of water quality • Cost savings, e.g. LCRA replacing filters is costly • Preserving power production • Protecting fish habitat • Property owners ability to repair docks • Protecting bass habitat specifically • Commercial interests, maintaining the ambiance of the lake 	<ul style="list-style-type: none"> * Update the Lake Austin Hydrilla Management Plan to be consistent with the current state of science regarding aquatic macrophyte management, the specific process for determining Asian Grass Carp stocking rates, and applicability with current state and federal water quality standards. * Document and continue the iterative, proactive process for determining Asian Grass Carp stocking rates to achieve adaptive management. Increase the rate to 55.5%. Also improve the purchasing process to allow staff to react quickly, be more nimble. * Ask all agency partners to budget funds for grass carp purchase. * State that the Task Force believes that Asian

	<p>Grass Carp are the main keystone, dependable solution to the Hydrilla problem. They are not the exclusive control option.</p> <p>*The Task Force has examined and ruled out some possible lake-wide treatment options for the City including systematic mowing, pulling it up by the roots, and completely draining the lake and pulling it up.</p>
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All Other Brainstormed Options for Hydrilla/Aquatic Vegetation

- Development of a proactive and predictive process for determining Asian Grass Carp stocking rates, as opposed to the current process based solely on macrophyte coverage estimates.
- Increase the frequency of macrophyte coverage surveys that are conducted in conjunction with the Texas Parks and Wildlife Department and adjust stocking rates accordingly.
- Continue to work with the LCRA in supporting seasonal water volume draw-downs in the lake.
- Consider a moratorium on mowing Hydrilla and study the impact of mowing.
- Share Hydrilla management information during the permitting process.
- Increase enforcement and education for those who obtain permits for mowing Hydrilla, so they know to put the mown material far enough off the shore.
- Provide additional staff support.
- Chemical treatment (this option was rejected by the workgroup, along with others.)
- State that the Task Force supports what the city is doing and that they believe Grass Carp are the most viable, long-term solution to the Hydrilla problem.
- Increase education and outreach regarding handling and removal and the permitting process for Hydrilla.

Issue: Sound/Noise

Work Group Report

Users of Lake Austin and property owners surrounding Lake Austin continue to complain regularly of noise coming from boats on the lake. The most frequently complained of noises are (1) amplified sound from boats and (2) boat engine/exhaust noise.

Problem 1 (Amplified Sound) Analysis

- Most motorized boats on the lake have sound equipment on board.
- The City of Austin has long had restrictions on amplified noise for cars and related motor vehicles.
- In 2009, City Council enacted a similar ordinance applicable to watercraft. The law states that “a person may not operate sound equipment in a watercraft audible or causing a vibration 100 feet from the equipment.” [Austin City Code §9-2-3(A)(6)]
- Since adoption of the 2009 law, amplified sound on the lake is reduced but citizens continue to complain that enforcement appears to be inconsistent. While enforcement in the coves seems to be regularly applied, enforcement on the main waterway of the lake appears to be less regularly applied.

Problem 2 (Engine/Exhaust Noise) Analysis

- Combustion engines produce noise.
- The Texas Water Safety Act provides that “a motorboat operating on the water of this state must have an exhaust water manifold or a factory-type muffler installed on the engine.” [Texas Water Safety Act § 31.070]
- Citizens continue to complain about engine/exhaust noise.

Remedy Analysis

It is recommended that the following remedies be considered:

- Direct law enforcement officers patrolling the lake to provide more consistent enforcement of the existing sound ordinance applicable to watercraft.

Interests Considered and Consensus Options for Sound/Noise

Interests (Unmet Needs)	Options that Achieved Consensus
<ul style="list-style-type: none"> • Quality of life for those who use the lake and those who live or work near it. 	<ul style="list-style-type: none"> ✧ Direct law enforcement officers patrolling the lake to provide more consistent enforcement of the existing sound ordinances applicable to watercraft. (Note: This will apply to both amplified sound and engine/exhaust noise.) ✧ Simplify the process for getting APD boats repaired, so it can be accomplished more quickly, so that APD is not chronically short of boats for Lake enforcement. ✧ Add to the existing law enforcement database, a database that allows officers to track violators of the sound ordinance on the lake.

All Other Brainstormed Options for Sound/Noise

- Provide law enforcement officers with needed equipment.
- Remove sound systems on boats.
- Increase funding for additional patrol equipment.
- Provide increasing penalties for frequent violators of the noise ordinances and maintain a database of violators of sound ordinances.
- Establish a zero-tolerance enforcement policy during certain periods of time (similar to “no refuse weekends”).
- Reduce the limit for noise from 100 feet to 50 feet.
- Put up signs at boat ramps about the noise ordinances.
- Enforce noise trespass from amplified sound coming from land and commercial cruise boats.
- Modify the sound ordinance to apply also to engine noise and amplified sound within 100 feet of the shoreline.
- Modify the municipal sound ordinance to also apply to engine noise.
- Write the engine noise provision (from state law) into the municipal noise ordinance.

Issue: Water Quality and Monitoring

Work Group Report

Lake Austin is a valued public asset, and protection of its water quality and aquatic integrity is considered a high priority by this task force. To this end, the following questions were evaluated:

- Does the currently available data indicate toxicants, including but not limited to pesticides, herbicides and petroleum products present in the lake's water or sediments at levels that pose unacceptable risk to human health and the environment?
- Are nutrient and sediment loading in the lake increasing in intensity?
- Are contact recreational uses at risk due to elevated bacterial levels?
- Is the current monitoring of the lake's water chemistry and aquatic integrity adequately robust to decipher potential impairments (including but not limited to increased nutrient and sediment loading, herbicide and pesticides, petroleum products, increased turbidity, low dissolved oxygen) and causes now and into the future?
- Considering the lake is an unnatural, highly managed impoundment, with near shore areas dominated by residential and commercial development; and home to numerous non-native and in some cases invasive plant and animal species can its aquatic integrity be effectively evaluated and ranked using conventional methods?

Problem Analysis:

Pesticides and Herbicides

- Pesticide and herbicide are mostly likely to enter the lake through residential and commercial land application in areas directly adjacent to the lake and throughout its watershed.
- Available surface water and sediment data does not indicate legacy pesticides and herbicides at levels that pose risk to human health and the environment are present or entering the lake.

Petroleum Products

- Fuel storage, watercraft fueling practices (including but not limited to residential docks, boat ramps and the Lake Austin Marina) and watercraft uses on the lake were identified as the primary potential contributors to petroleum products or hydrocarbon compounds in the lake.
- Secondary sources including rainfall runoff from roads and parking lots; above-ground and -underground storage tanks were also considered.
- Available surface water and sediment data does not indicate petroleum products or hydrocarbon compounds at levels that pose risk to human health and the environment are present in the lake.

Nutrients and Sediment Loading

- A trending increase in the severity, frequency and duration of blue-green algae blooms on the lake is apparent. These blooms are indicative of eutrophication (increasing nutrient levels). Eutrophication is a natural process that all lakes go through, however human activities often exacerbate and accelerate the process.
- Increased sediment loading as a result of land use practices and on-site sewage facilities (OSSFs-septic tank) in the watershed are believed to be the primary sources of nutrient loading in the system.

Contact Recreation Impairments

- Water bodies are most likely to have elevated bacterial levels following significant storm events.
- Multiple creeks within the Lake Austin watershed are currently listed or have been listed in the recent past for contact recreation impairments due to elevated bacterial levels.
- These impairments are likely due to failing conventional gravity sewage lines and OSSFs.
- Currently only Taylor Slough South is listed on the Clean Water Act 303d list for contact recreation impairment due to elevated fecal bacteria.

Low Dissolved Oxygen

- Lake Austin was listed on the 1998 303(d) list for aquatic life use impairment due to low dissolved oxygen levels immediately below Mansfield Dam at the upstream end of the lake.
- A Total Maximum Daily Load analysis was completed in November 2000, with the major findings that the low DO is a result of water released from the bottom of Lake Travis, which is thermally stratified during the summer months. The LCRA installed an aerator on one turbine to effectively aerate the water used and released.
- Dissolved oxygen levels are at times still below what is considered ideal for high aquatic life in the upper portions of the lake.

Monitoring

- Multiple departments and agencies both inside the City of Austin and outside currently or in the past have monitored water quality and aquatic integrity of the lake. Concerns that these data are not fully utilized in assessments and a lack of data sharing amongst groups has arisen.

Cause Analysis:

The following information (but not limited to) was reviewed:

- Lake Austin's sediment and water quality data house in the State's TRACs system and the City of Austin's database.

- City staff compiled specific data, and provided multiple presentations on Lake Austin's Water Quality.
- The USEPA's National Lakes Assessment report was review.
- TNRCC, 2000 *A Total Maximum Daily Load for Dissolved Oxygen in Lake Austin*
- TCEQ, 2011. *Trophic Classification of Texas Reservoirs 2010 Texas Water Quality Inventory and 303(d) list.*

Remedy Analysis:

The Water Quality and Environment work group recommends the following:

- Continued effort to consolidate and collaborate in lake planning and monitoring programs amongst stakeholders and involved agencies with increased data sharing.
- Development of a Historical Data Review for Lake Austin, to identify data gaps and needs and an annual Lake Austin Report, presenting monitoring methods, data collected and analysis procedures.
- Continued effort at deducing the causes of blue-green algae blooms on the lake.
- Consideration of establishing, either on the staff or department level, a group whose sole responsibility is management of Lake Austin watershed.

Interests Considered and Consensus Options for Water Quality & Monitoring

Interests (Unmet Needs)	Options that Achieved Consensus
<ul style="list-style-type: none"> • Maintain the high water quality • Public safety, including for swimming and drinking • Have transparency for the public about the water quality of Lake Austin • Preserve water quality for fish and other species • Acknowledge the impact of decreasing water flow through the Lake because of the drought. • Understand the relationship between water quality and development • Interest in developing the land around the Lake. 	<ul style="list-style-type: none"> ✧ Consolidate and coordinate in lake planning and monitoring programs amongst stakeholders and involved agencies with increased data sharing. ✧ Develop a Historical Data Review for Lake Austin, to identify data gaps and needs and an annual Lake Austin Report, presenting monitoring methods, data collected and analysis procedures. ✧ Put resources into place and continued efforts at deducing the causes of blue-green algae blooms on the lake, such as source tracking. ✧ Consider establishing, either on the staff or department level, a group whose sole responsibility is management of the entire Lake Austin watershed. ✧ Within three years, the City will have established with the best scientific knowledge, the causes of blue-green algae blooms on the lake. ✧ As a policy recommendation, the City should upgrade its standards for OSSFs. ✧ Add the phrase "and provide easy access for the public to this information" to Option A.

All Other Brainstormed Options for Water Quality & Monitoring

- Establish a body responsible for consolidation and coordinating lake planning and monitoring programs amongst stakeholders and involved agencies with increased data sharing.
- Continue to coordinate with LCRA to maintain water quality standards. (*The group agreed that this was included in Option A.*)

Issue: Erosion

Interests Considered and Consensus Options for Erosion

Interests (Unmet Needs)	Options that Achieved Consensus
<ul style="list-style-type: none"> • Limiting erosion to protect this natural resource • Enjoyment of the Lake by a variety of users and property owners • Safety of lake users • Not concentrating specific uses in just one area • Limiting the negative impact of erosion on flora and fauna • Enforceability of rules • Don't study problems if there's no solution • Acknowledge that the City doesn't have unlimited resources 	<ul style="list-style-type: none"> ✱ Develop a process for creating navigation zones to limit erosion. ✱ Support stream and creek bank stabilization and restoration and education about these issues.

All Other Brainstormed Options for Erosion

- Limit the number of boats.
- Staff public ramps on weekends and holidays.
- Limit the number of boat docks and use a model to determine the number.
- Create no-wake zones.
- Make time or place limits (temporary and/or permanent) on certain Lake uses.
- Within a year, do a study to understand the sources of wave-caused erosion, e.g. using wake sensors. Investigate what are waves' impact on erosion? Where is the traffic that's causing the problems? What are the causes of erosion?

Issue: Commercial Uses

Work Group Report

There is the presence of various users of Lake Austin whose business depends on the lake (and in some cases public docks or piers) and who profit from that use. Included are party boats, tour boats, boat rental operations, marinas, restaurants, boat repair facilities, tow boat services etc. There is no licensing process or system for executing that licensing for lake use by commercial operators. There is one sewage pump out facility on the lake. There is one gas fueling facility. In addition there are undeveloped opportunities for commercial and recreational operations on Lake Austin that could generate funding for improvements on the lake such as increased lake patrol presence, Hydrilla control or others. There is also the opportunity to increase recreational and tourist-based activities.

Conversely there are some commercial uses that should neither be encouraged nor permitted. Included in this category would be marinas and boat storage facilities.

Problem Analysis

- The number and type of commercial operations on the lake has not been compiled.
- Users of the lake in its upper reaches must travel a significant distance to purchase gas on the lake.
- Unregulated and unsupervised commercial operations may be a source of trash, pollution and higher levels of traffic that may lead to safety concerns.
- There is the opportunity to provide funding for lake related activities by collecting fees for using boat launching ramps. These fees can pay for attendants at the ramps during summer months.
- Because the lake is the city's drinking water supply it's important to address possible pollution sources. All boats that carry larger numbers of people must have adequate sewage holding capabilities and have access to a properly maintained and readily accessible pump out station.
- There may be inadequate codes, ordinances or policies that address the construction of marinas or boat storage facilities.
- There could be more emphasis on recreational activities that may be a funding source. There could also be an emphasis on developing ecotourism.

There was no written Remedy Analysis by the Work Group

Interests Considered and Consensus Options for Commercial Activities

Interests (Unmet Needs)	Options that Achieved Consensus
<ul style="list-style-type: none"> • Public safety, including access for police and fire department • Commercial interests, having a successful business, making money • Having the amenity of the lake and access to that amenity • Providing the City with revenue to increase the budget for Lake-related costs • Improved services for users, including parking • Promoting water safety • Easier access to safe fueling • Accessibility to boaters • Understanding who the users are • Preserving the beauty of particular areas • Reducing pollution, litter • Appropriate spacing for users 	<ul style="list-style-type: none"> * Develop and maintain a data bank of commercial users of the Lake and adjacent Lake shores. * Investigate possible locations for a second gas fueling station and additional sewage pumping facilities, considering environmental impacts as well as other factors. * Investigate, do a feasibility study, of possible commercial operations such as canoe, kayak, paddleboard rentals at Emma Long Park or other locations. * Provide for boat launching fees at public ramps and employ attendants to collect the fees. * Utilize funding sources such as Parks and Wildlife's Paddling Trails program or LCRA's Colorado River Trails program to increase recreational opportunities. * Research possible public-private partnerships or other funding strategies for construction of new concessions and/or City facilities. * Improve public boat ramps and parking, especially at Walsh. * Establish a licensing system and process for commercial users of the lake with appropriate fees and appropriate oversight.

All Other Brainstormed Options for Commercial Activities

- Establish a licensing system for commercial users of the Lake with appropriate fees.
- New marinas or boat storage facilities not be allowed.
- Promote nature and ecotourism-related activities such as birding.
- \ Create an organization to promote tourism and recreation on Lake Austin, including exploring possibilities of a Lake Austin Scenic Vista Corridor. Explore opportunities for funding with the Governor's Enterprise Fund.
- Limit additional marinas.
- Relative to recommendation D, clarify the code for different uses of the shoreline, for example, for motorized (farther from shore) and non-motorized watercraft (closer to shore.)

Issue: Funding

Interests Considered and Consensus Options for Funding

Interests (Unmet Needs)	Options That Achieved Consensus
<ul style="list-style-type: none"> • The City being able to actively manage the resource of the Lake. • Updating infrastructure to reflect the beauty of the Lake. • Equitability – those who benefit the most help fund it. • Spreading support for the Lake among all users. 	<ul style="list-style-type: none"> * Create a Master Plan for the Lake. For example, identify long-term and short-term projects. Long-term projects might be funded through bonds. * Establish license fees for commercial use of the Lake. * Establish launching fees with the funds going to Lake management. * Get a commitment from other agencies, such as LCRA, to fund Lake activities. * Dedicate all lake usage fees to Lake-related expenses. * Work with Travis County to ensure that any existing residential shoreline tax be applied to Lake Austin maintenance and operation. (The group will first verify that such taxes exist.) * Investigate the possibility of establishing license fees for private docks on public land. * Dedicate a particular amount of City of Austin general funds coming from property taxes on properties in the Lake Austin watershed to Lake Austin-specific uses.

All Other Brainstormed Options for Commercial Activities

- Establish recreational boat user fees (e.g. annual fees, like they do on beaches.)
- Establish license fees for private docks on public land.
- Investigate possible government grants for funding Lake activities.
- Investigate the feasibility of a special taxing district for Lake maintenance.

Issue: Traffic

Interests Considered and Consensus Options for Traffic

Interests (Unmet Needs)	Options That Achieved Consensus
<ul style="list-style-type: none"> • Have our recommendations be legal • Protect public safety • Think of recommendations that would solve the problem and let the City work on legality • Acknowledge the existing conflicts between Lake residents and day users of the Lake • Manage diverse uses and their interests • Seek solutions that are practical and enforceable • Manage land vehicles (cars, trucks, trailers) associated with Lake use • Respect private property owners' rights • enforceability and practicality, • fairness and a desire not to totally ban any particular use, • Desire to spread out various uses of the lake rather than segregating them into specific areas, • Desire for any ban to apply to the entire lake, and • Concern that erosion caused by wakes would not be reduced with a ban for only small periods of time. 	<ul style="list-style-type: none"> ✱ Collect a fee for launching at the City of Austin public ramps. Revenue should be dedicated to Lake Austin needs, such as maintaining boat ramps, improving boat ramp trailer parking areas, converting vertical bulkheads and dealing with invasive species. ✱ Enforce parking restrictions at City of Austin public ramps. Encourage Travis County to enforce parking at Loop 360 boat ramps, including the illegal parking along the shoulders of Loop 360. ✱ Collect a fee for launching at the public ramps that would be used to employ an attendant at the ramps. ✱ Special attention is needed at Emma Long Park to keep swimmers inside of the swim areas. More buoys may need to be added along the shoreline of the camping area to separate boat traffic and campers. ✱ Designate 50 feet from the shore as a no-wake zone.

All Other Brainstormed Options for Traffic

- In conjunction with collecting boat launch fees, maintain accurate numbers of boats launched at each City of Austin public boat ramp.
- Encourage the Lake Patrol to establish standards for hazardous wakes and to actively enforce these standards.
- Consider utilizing no-wake zones in designated areas. Specifically, establish a no-wake zone from Tom Miller Dam to the end of Lake Austin Marina for a trial period of one summer. Consider adopting this no-wake zone as a permanent no-wake zone during summer months only.
- Survey the number of boats launched from the public boats ramps on weekends during summer months. Following this analysis consider reducing traffic on the lake by placing a quota on the number of boats that may be launched from the public boat ramps on weekends during summer months. This quota would dovetail with concerns regarding limited parking.

- Prohibit any water sport dependent on being pulled by a boat or using waves generated by a boat unless the person behind the boat is on a rope of at least 50 feet in length.
- Limit the size of boats with planing hulls in use on Lake Austin to 24 or fewer feet.
- Encourage the lake patrol to establish standards for hazardous wakes and to actively enforce these standards.
- Consider utilizing no wake zones in designated areas.
- To reduce congestion and promote safety, boaters using boat ramps should be clear the boat ramp area before stopping to off load any skiers, i.e. create a buffer zone around the ramps.
- To better manage lake traffic, non-motorized boats should be encouraged to operate within 50 feet of the shoreline. When crossing the lake, the non-motorized boater should cross at a safe time and without delay. Non-motorized boats should not remain in the river channel longer than necessary to cross the river.
- Just as on land roadways, slower traffic on a river should stay to the right of the center channel. Boaters who wish to stop on the lake should move out of the center of the river channel toward the right-hand shoreline.
- Lake Patrol should enforce state code- 31.101. Obstructing Passage (No person may anchor a boat in the traveled portion of a river or channel so as to prevent, impede, or interfere with the safe passage of any other boat through the same area.)
- Notice should be posted at public parks, swimming areas, boat ramps informing the public of these regulations and recommendations. COA should notify all private park owners, marinas & neighborhood associations along the lake of our recommendations.
- To reduce congestion, boaters using boat ramps should be clear the boat ramp area before stopping to off- loading any skiers.
- The City of Austin should increase the number of personnel assigned to the Lake Patrol.
- The Lake Patrol should have the resources to 'control & manage' boat traffic on the lake.
- During the summer months, the Lake Patrol should have three stations on Lake Austin, at Mansfield Dam, Emma Long Park and Tom Miller Dam. This will allow the Lake Patrol to monitor 5-6 miles sections of the lake and actually 'control & manage' boat traffic.
- The City of Austin should enforce Texas Water Safety Act, especially sections § 31.094. Reckless or Negligent Operation; § 31.098. Hazardous Wake or Wash and § 31.101. Obstructing Passage.
- Data should be kept on boaters who violate the Texas Water Safety Act and repeat offenders should be removed from the lake.
- Do a scientifically valid study of different users of the Lake – the number and type. (For example, walk the marinas and count trailers, have the Lake Patrol use counters and count boats the entire length of the Lake.
- Establish a no-wake zone from Tom Miller Dam to the end of Lake Austin Marina for a trial period of one summer. Consider adopting this no-wake zone as a permanent no-wake zone during summer months only.
- Prohibit motorized watercraft from operating, except at cruising speed, within 50 feet of the shoreline.
- In cooperation with the Lake Patrol, designate some high traffic areas of the Lake during high-use weekends (Memorial Day, Labor Day, 4th of July) as areas where wake-generating devices are not allowed. Use the same process as is used for jet skis on those weekends.

- Try option BB for a year and gather data to see if it helps (do a 1-year pilot).
- Prohibit any water sport dependent on being pulled by a boat or using waves generated by a boat unless the person behind the boat is on a rope of at least 50 feet in length.
- During the three highest use weekends prohibit wake surfing.
- Not allow wake boarding or surfing during the three highest use times in certain defined areas of the lake.
- Not allow wake boarding or surfing during high- use times in certain defined areas of the lake.
- Not allow wake boarding or surfing during high- use times anywhere on the lake.
- During known high-use weekends, prohibit devices such as fat sacks that are designated to increase wake size. Do this as a pilot and see if it's effective.
- Conduct a pilot study in which wake boarding or surfing is not allowed during high- use times anywhere on the lake.

Issue: 50% Rule

Work Group Report

50% Rule states that 50% of the boat dock or shoreline modification may be maintained.

Problem Analysis:

This recent code change has been problematic because it is too subjective and vague. It needs to be clarified and the 50% rule needs to be deleted. It is unlikely that only 50% of the framing of a dock needs replacing or 50% of the length of a bulkhead is failing. Entirely new docks are being constructed with site plan exemptions using steel instead of wood, bypassing review process and effectively allowing docks to maintain non-complying status rather than meeting current code. Currently applicants are claiming that replacing all of the supporting elements is ok (but current code states 50% is ok.) There is difficulty in defining 50%. Anything greater than 50% requires a demolition permit.

Another issue is the fee. The amount of time that Environmental Inspection needs to devote to oversight far exceeds the \$94 review fee for a site plan exemption. Site plan exemptions are not reviewed by the Watershed Protection Department (environment, flood plain), Parks and Recreation Department, or Building Inspection, etc.

Cause Analysis: Describe the information that was reviewed to determine the cause of the issue.

LDC, Application Packet 19

Applicable LDC sections need to be revised

§ 25-2-961 NONCOMPLYING DEFINED.

§ 25-2-962 STRUCTURES COMPLYING ON MARCH 1, 1984.

25-2-963 MODIFICATION AND MAINTENANCE OF NONCOMPLYING STRUCTURES

Remedy Analysis:

- Delete this 50% rule.
- Need to revise application packet 19 and LDC sections to restrict what may qualify as an exemption.
- Need to define routine maintenance as re-decking, replacing handrails or reroofing.

Interests Considered and Consensus Options for the 50% rule

Interests (Unmet Needs)	Options That Achieved Consensus
<ul style="list-style-type: none"> • Avoiding people “getting around” the requirements. • Property owners being able to maintain their docks and bulkheads without requiring a complete remodel. • Not promoting noncompliance. • Establishing a clean baseline of what’s there and what’s compliant. • Safety, water quality, reducing erosion • Having a practical solution • Having a legal solution • Eventually, getting all docks and bulkheads into compliance. 	<p>✱ Create a boat dock registration process that is required. If you register within a certain number of years of the establishment of the registry, you can keep your noncompliant dock in perpetuity as long as you don’t expand its footprint. The footprint (horizontal and vertical) and location would be grandfathered. Registration would require a photo and drawing and a \$50-\$75 fee. The fee would be used to support staff to do the work and verify the data. Use information that is already in the files. If your dock was built after 1974 it must have a permit. If your dock was built after that date and has no permit, it is illegal and must comply with current code.</p> <p>✱ Allow a 25% rule with a site plan exemption for bulkheads. You cannot repeat this exemption within a 3-year period..</p> <p>✱ Modification, maintenance, repair, replacement or reinforcement of boat docks under a site plan exemption (SPE) should be limited to non-structural changes to existing components. Allowed work under an SPE may include repair or replacement of the existing decking, railing, roofing etc. The following changes are NOT allowed:</p> <p style="padding-left: 40px;">Changes to structural components (load bearing beams or walls, piers, roof structural components, etc. no additional walls (load bearing or not) No additional height, width or depth for legal, non-complying structures, nothing that increases non-compliance.</p> <p>✱ Code should be changed to require a pre-construction meeting with Environmental Inspector prior to work commencing under an SPE. All other boat dock remodeling should require a site plan with associated drawings, pre-construction meeting and inspections.</p>

All Other Brainstormed Options for the 50% Rule

- Have a time period for registering your dock or bulkhead with a grandfathered “grace” period. After the grace period the City can verify if the work falls under the 50% rule. You have to wait two years for the next 50%.
- Have annual or semi-annual permits with a visible address. The money from those permits would be used for enforcement.
- Staff be specifically assigned to this and paid with the fees collected.
- Any new changes have to meet the new code.
- Option A plus a particular length of time after which you have to be compliant.
- Get registered and grandfathered for a year or so, but “sunset” the grandfathering so it doesn’t last forever.
- Make boat docks consistent with other building codes in the City.
- Treat docks separately from bulkheads.
- Have a “less than 50%” rule, for example, a “25% rule”.
- If it’s been grandfathered and you keep it stable, let it be.
- Write in the code the ability for staff to write an exemption if the structure couldn’t be made compliant without making it impractical or unsafe.
- Sunset noncompliant docks when the ownership transfers.
- Grandfather existing docks.
- For bulkheads, allow less than 50%.
- Have an exemption for not more than 50% within a 3-5 year period.
- Get your bulkhead to compliance if you transfer the property.
- Require disclosure to new owner if the bulkhead or dock is noncompliant.
- If you’re doing work IN the lake, you still need a site plan.
- Within [x] years, have staff inventory what’s there.
- If you work without a permit, increase the fine. Implement this policy consistently.
- Have option V but state that stand-alone boat lifts (in docks or outside them) that sit on the lake bed would not require site plans.
- Include a definition of boat lifts in the staff definitions/clarifications.
- Distinguish if the work is above or below the water level.
- Do a pre-construction conference.
- Distinguish between structural and non-structural changes.
- Recommend option V but exclude stand-alone boat lifts from that recommendation.
- Have the same 25% rule that the group agreed to for bulkheads, apply also to boat docks.

Issue: ID Tags for Boat Docks

Work Group Report

City has not enforced ID tags for boat docks but the Environmental Criteria Manual does give street address of residence as the proper ID for the dock. Street addresses would help locate people in emergencies.

Cause Analysis: ECM, 25-2-1173 Permit Required for Construction (b) requires an ID tag.
ECM- 1.13.4 Identification Tag Required for Dock and Erosion

A. Guidance for Identification Tag Required for Dock.

Identification or registration tags shall be placed on the dock by an applicant as part of the requirements for a permit for construction of a dock as per LDC 25-2-1173(B). The identification or registration tag shall consist of the street address of the property on which the dock is located and shall be displayed on the lakeward side of the dock facing the centerline of the lake or slough on which it is located. The letters and numbers must be at least two inches in height, contrast with the background and be constructed with materials that resist water damage and deterioration by ultraviolet light.

Remedy Analysis:

- ECM 1.13 language could be required to identify location of letters on Site Plan. This section should go on to explain the process to identify all docks...retroactive identification
- Application Packet #19 to ask for their ID number and where they will place it on their dock.
- Owner to supply their own address letters.
- However staff could use the excuse of a tag process and addressing to be a compliance issue.
- Obtaining a tag could establish a compliant boat dock for all of those docks that cannot prove when they were permitted.

Interests Considered and Consensus Options for ID Tags for Boat Docks

Interests (Unmet Needs)	Options That Achieved Consensus
<ul style="list-style-type: none"> • Having correct and consistent information from the City about requirements, • Helping locate people from the lake in emergencies and improving safety, • Some people have privacy concerns • Helping the City identify if a dock is in compliance. 	<p>✱ Allow the City to decide how the tag requirement will be implemented as part of the boat dock registration process. City should consider using mile markers from the dam rather than street addresses.</p>

All Other Brainstormed Options for ID Tags for Boat Docks

- Have an ID that uses mile markers rather than street addresses.
- Have the City designate the mile marker number, e.g. have the EMS Department designate them.
- Have the address indicate whether they are compliant or non-compliant.
- Tie GPS coordinates to the tag.
- Have an address on the ID tag.
- Remove the need for an address on the tag from the Code.
- Allow the City to decide how the tag will be done as part of the registration process.

Issue: Other Boat Dock Issues

Interests Considered and Consensus Options for Other Boat Dock Issues

Interests (Unmet Needs)	Options That Achieved Consensus
<ul style="list-style-type: none"> • Clarity of definitions • Need for updating code to reflect changes in technology, etc. 	<p>★ City staff should:</p> <ol style="list-style-type: none"> 1. Update and modernize the Code relating to boat docks. 2. Review how terms are defined so that they are clear, consistent and workable. 3. Address the following issues identified by the Task Force: <ul style="list-style-type: none"> • <i>Definition of “boat lifts”</i> • <i>Question of height (limits)</i> • <i>Requirements for marinas may not make sense, e.g. parking requirements.</i> • <i>Address issues relating to the fact that not all docks are linked to residences.</i> • <i>Several issues of clarity around Article 13 such as the definition of a dock, the need to update to include newer technologies such as solar power, and the definition of a permanent structure.</i> 4. Provide opportunities for public involvement in these code changes.

All Other Brainstormed Options for Other Boat Dock Issues

- List the “other boat dock” issues as concerns and recommend that staff address these concerns.
- City staff should review all the Code relating to boat docks and make sure that all terms are defined and definitions are consistent and workable. City staff have been doing this research and we support them continuing their work.
- List the “other boat dock” issues as concerns and recommend that staff address these concerns and provide opportunities for public input.
- City staff should review all the Code relating to boat docks and make sure that all terms are defined and definitions are consistent and workable. Staff should present their code changes to Council.
- Update and modernize the Code relating to boat docks, including definitions, with opportunities for public input.

Issue: Variances

Interests Considered and Consensus Options for Variances

Interests (Unmet Needs)	Options That Achieved Consensus
<ul style="list-style-type: none"> • Make the variance process clearer, less “messy” • Have the variance process handled by a group that is appropriately knowledgeable and experienced with these specific issues. • Clarify the Land Development Code, including avoiding the need for many variances. • Not have staff duplicate or repeat work with no clear resolution. • Having clear findings of fact to allow the applicant, staff and recommending body to make wise decisions. • Being consistent with other City variance processes and being internally consistent and predictable. • Having the deciding body have sufficient experience and expertise in dealing with these issues. • Having an appropriate approving body in the interim while changes are being studied. • Having a body that uses findings of fact. • Having a logical system for handling variances. • Efficient processing of requests for variances. • Clarity of the process so people know what to expect. • It would be a relief to have all variances handled in one place. • Have a fully thought out recommendation • Having a process that provides for public input. 	<p>★ Specific to §25-8 variances: leave the code as it was changed in May 2012 except make Zoning and Platting Commission the approval body. (That is, no administrative approvals, goes to the Environmental Board for advisory purposes, then to Zoning and Platting for final review and decision.)</p> <p>★ The Task Force believes that the Parks and Recreation Board is not the appropriate venue for variance approvals. These requests should go to a more appropriate Board. City staff should consider deeply, in conversation with other relevant groups, who is the most appropriate Board to approve variances. The Task Force is not necessarily asking for a new Board to be created. The Task Force encourages a process that uses findings of fact.</p>

All Other Brainstormed Options for Variances

- Leave §25-8 (water quality & environmental) variances with the Zoning & Platting Commission.
- Leave §25-8 (water quality & environmental) variances in the Planning Commission
- Ask staff to study deeply the question of the role of Parks and Rec Board, especially in development-related cases.
- Put navigation issues in the Public Safety Commission or a similar commission.
- State that the Task Force believes that PARB is probably not the appropriate venue for all except §25-8 variances and ask staff to study deeply who would be better suited for this role.
- Put variances with the Environmental Board.
- State that this is a very urgent issue and ask that it be dealt with expeditiously.
- Impose a moratorium on variances until the ordinance can be changed.
- Have a single Board oversee all development of shoreline variances; one that has technical staff with appropriate knowledge of science, zoning and land use.
- State that the Task Force does not intend the Council to create a new Board, but use an existing Board that uses findings of fact.
- Create a Board that just focuses on Lake Austin.
- Allow §25-8 administrative variances as they existed before the code change.
- Have all §25-8 variances go to the Environmental Board, with no option for administrative approval.
- Leave the ordinance as it currently is (i.e. leave the May 2012 change in place with no administrative approval for 500' of shoreline, all variance requests go to the Planning Commission.
- Repeal the May 2012 changes and go back to the way it was before that change (with administrative approval for some cases and others going to the Zoning and Platting Commission.)

Issue: Public Education and Outreach

Interests Considered and Consensus Options for Public Education and Outreach

Interests (Unmet Needs)	Options That Achieved Consensus
<ul style="list-style-type: none"> • Neighborhood Associations around the Lake want and need information • Homeowners on the lake want and need information on best environmental practices for erosion, bulkheads, fertilizers, stream bank restoration, public safety and flood protection. • Lake users need to know rules, regulations, environmental information and information about flood and weather alerts. • Neighbors near boat landings need information. • The Public Safety and other City departments have an interest in public education. • Environmental groups have an interest in public education on water quality issues, birding activities, development and stream bank issues. • The public and homeowners in the Lake watershed need information about who has authority and lake management activities. • People in the watershed need education about the dangers of wildfires and how to prevent or protect themselves and their property. • People living along creeks that flow into Lake Austin need information. • Developers and homeowners need information about building regulations. • The Chamber of Commerce has an interest in promoting information about birding, swimming, boating, other recreational opportunities, environmental protection and promoting tourism. • Separate the regulatory functions from education or advisory roles. 	<ul style="list-style-type: none"> ✱ Ask the Environmental Education group in Watershed Protection to focus public education and outreach efforts towards homeowners in the Lake Austin watershed on topics including: best environmental practices for erosion, bulkheads, fertilizers, stream bank restoration, public safety and flood protection. ✱ Create an Advisory group, similar to the Lady Bird Lake Advisory group, for Lake Austin.

All Other Brainstormed Options for Public Education and Outreach

- Create a public education/information Plan that addresses the interest groups.
- Create a Lake Austin Team at the City of Austin to include Watershed Protection, Development Review, Public Information, Parks and Public Safety. The team should meet regularly to coordinate and discuss issues and implement best practices.
- Create an interagency working group that includes COA, LCRA, Parks and Wildlife.
- Create a Citizens' Advisory group of City staff and diverse stakeholders that informally discusses issues and provides advice.
- Form a Citizens' Advisory group and let them develop an Education/Outreach Plan and the City team.
- Make Public Education and Outreach a role that is given to the group with sole responsibility is management of the entire Lake Austin watershed.
- Have representation of the interest groups on a new Board.
- Have education and outreach within the Board that handles variances.
- Create a Lake Austin Team at the City of Austin to include Watershed Protection, Development Review, Public Information, Parks and Public Safety. Mandate that the team should meet quarterly to coordinate and discuss issues and implement best practices.
- Have the group with sole responsibility for managing the Lake watershed form a Citizens' Advisory Committee, as in D above.
- Have the Citizens' Advisory group report annually to Council on issues that they have discussed and that have come from stakeholders.
- Model the Citizens' group on the LCRA Lake Austin Advisory Panel.
- Have a corresponding Citizens' group to work with the staff or Department group.
- Add Lake Austin to the charge of the Lady Bird Lake Advisory group.
- Either add Lake Austin to the charge of the Lady Bird Lake Advisory group OR establish a similar body for Lake Austin.

Issue: Lake Austin Zoning

Work Group Report

Work Group: Everyone (Policies & Procedures category)

Issue: (DRC8) Up-zoning eliminates protections that are unique to Lake Austin.

Problem Analysis:

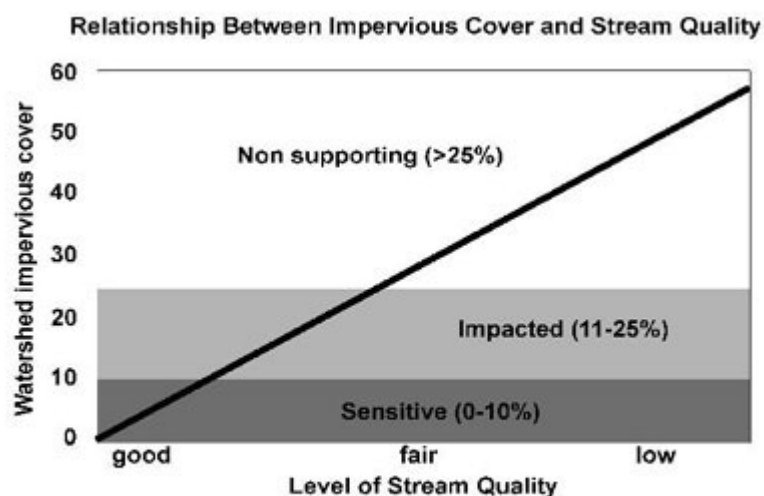
Environmental protections for Lake Austin are specified in the LDC as a residential zoning district. The Lake Austin Residence District is defined as a geographical boundary that applies to all property within 1,000 feet of the shoreline. When a property within this boundary is rezoned to a different zoning district (such as SF-1, SF-2, SF-3, PUD, etc), the environmental protections for Lake Austin no longer apply and increased density is encouraged with smaller lot sizes and less open space.

	LA	RR	SF-1***	SF-2	SF-3
MINIMUM LOT SIZE (square feet):	43,560	43,560	10,000	5,750	5,750
MINIMUM LOT WIDTH:	100	100	60	50	50
MAXIMUM DWELLING UNITS PER LOT:	1	1	1	1	**
MAXIMUM HEIGHT:	35	35	35	35	35
MINIMUM SETBACKS:					
FRONT YARD:	40	40	25	25	25
STREET SIDE YARD:	25	25	15	15	15
INTERIOR SIDE YARD:	10	10	5	5	5
REAR YARD:	20	20	10	10	10
MAXIMUM BUILDING COVERAGE:	—	20%	35%	40%	40%
MAXIMUM IMPERVIOUS COVER:	*	25%	40%	45%	45%

Cause Analysis: Staff provided a map that illustrates how property within 1,000 feet of the Lake Austin shoreline is currently zoned.

- A substantial amount of property along Lake Austin has already been up-zoned to a different residential base district, and there are applications pending to up-zone additional property from the LA zoning district.

- The Board of Adjustment regularly receives requests for variances to exceed the amount of impervious cover and to allow construction on steep slopes for property adjacent to Lake Austin. Many of these requests for variances are to bring the development into compliance with the zoning regulations (i.e., requested after the fact to clear a compliance violation).
- There is scientific support that impervious cover and construction on steep slopes degrades water quality, as illustrated in the following graphic and addressed in the 1980 Lake Austin Watershed Ordinance and the 1986 Comprehensive Watershed Protection Ordinance.



Source: Schueler, T. 1994. The Importance of Imperviousness. In: Watershed Protection Techniques 1(3):100-111.

- The protections for Lady Bird Lake are specified in the LDC as an Overlay District. **The protections specified for the Overlay District apply regardless of how a property within the overlay boundary is zoned.** The most westerly point of the District is Tom Miller Dam.

§ 25-2-175 WATERFRONT OVERLAY (WO) DISTRICT PURPOSE AND BOUNDARIES.

(A) The purpose of the waterfront overlay (WO) district is to promote the harmonious interaction and transition between urban development and the park land and shoreline of Town Lake and the Colorado River.

(B) **The WO district applies to all property in its boundaries.**

(C) The boundaries of the WO district are identified in [Appendix B](#) of this chapter.

- Likewise, the sensitive Barton Springs area is protected by an Overlay District. The Barton Springs zone is defined as “BARTON SPRINGS ZONE means all watersheds that contribute recharge to Barton Springs, including those portions of the Barton, Williamson, Slaughter, Onion, Bear and Little Bear Creek watershed located in the Edwards Aquifer recharge or contributing zones.” **The regulations for the Barton Springs Overlay District apply regardless of how the underlying property is zoned.**

§ 25-2-178 BARTON SPRINGS ZONE OVERLAY DISTRICT PURPOSE AND BOUNDARIES.

(A) The purpose of the Barton Springs Zone (BSZ) overlay district is to preserve the natural beauty of the Hill Country, protect the image and character of the neighborhoods in the district, and reduce the negative effects of urbanization by restricting the scale and intensity of retail development.

(B) The BSZ overlay district applies to the portion of the Barton Springs Zone, as described in Section [25-8-2](#) (*Descriptions Of Regulated Areas*), that is within the city’s zoning jurisdiction.

- Protections that are unique to Lake Austin are specified in the LDC as a Residential Base District.

§ 25-2-53 LAKE AUSTIN RESIDENCE (LA) DISTRICT DESIGNATION. Lake Austin residence (LA) district is the designation for a low density single-family residential use on a lot that is a minimum of one acre and that is located 1,000 feet or less, measured horizontally, from the 492.8 foot topographic contour line on either side of Lake Austin.

- The Lake Austin District Regulations contain the detailed regulations that are unique to property located within 1,000 feet of the shoreline.

§ 25-2-551 LAKE AUSTIN (LA) DISTRICT REGULATIONS.

(A) In this section:

- (1) **SHORELINE** means the 492.8 topographic contour line along the shores of Lake Austin.
- (2) **SHORELINE SETBACK** means a line parallel to the shoreline and at a distance from the shoreline that is prescribed in this section.
- (3) **SHORELINE SETBACK AREA** means an area between the shoreline and the shoreline setback.

(B) This subsection applies in a Lake Austin (LA) district.

- (1) A shoreline setback area is excluded from impervious cover calculations.
- (2) A **permanent improvement is prohibited in a shoreline setback area**, except for a retaining wall, pier, wharf, boat-house, or marina, or a driveway to the structures.
- (3) **Not more than 30 percent of the woody vegetation within a shoreline setback area may be removed.**
- (4) Except for surveying or testing, **vegetation within a shoreline setback area may not be removed before a building permit is issued.** For surveying or testing, areas up to 15 feet wide may be cleared, and trees smaller than six inches in diameter may be removed.
- (5) **Development is prohibited on land with a gradient that exceeds 35 percent.** This prohibition does not apply to a fence, driveway, road or utility that cannot be reasonably placed elsewhere, or a pedestrian facility.

(6) **A sewage holding tank that is at least partially below ground level, or an effluent disposal site, must be at least 100 feet horizontally from the shoreline. A sewage facility drain field that uses soil as a filter medium may not be located on land with a gradient of more than 15 percent.**

(C) **Except for a lot included in a subdivision plat recorded before April 22, 1982 or a tract that is not required to be platted, this subsection applies in an LA district.**

(1) **The shoreline setback is 75 feet.**

(2) A lot that fronts on a cul-de-sac must have:

- (a) a chord width of not less than 33 feet at the front lot line;
- (b) a width of not less than 60 feet at the front yard setback line; and
- (c) **a width of not less than 100 feet at all points 100 feet or more behind the front lot line.**

(3) **Impervious cover may not exceed:**

- (a) **20 percent, on a slope with a gradient of 25 percent or less;**
- (b) **10 percent, on a slope with a gradient of more than 25 percent and not more than 35 percent; or**
- (c) **if impervious cover is transferred under Subsection (E), 30 percent.**

(D) This subsection applies to a lot included in a subdivision plat recorded before April 22, 1982 or a tract that is not required to be platted, and that is located in an LA district.

(1) The shoreline setback is:

- (a) 75 feet; or
- (b) if the front line of the lot or tract is 200 feet or less from the shoreline, 25 feet.

(2) The lot or tract must comply with the front yard, street side yard, interior side yard, and rear yard setback requirements applicable in an SF-2 district.

(3) Impervious cover may not exceed:

- (a) 35 percent, on a slope with a gradient of 15 percent or less;
- (b) 10 percent, on a slope with a gradient of more than of 15 percent and not more than 25 percent;
- (c) 5 percent, on a slope with a gradient of more than 25 percent and not more than 35 percent; or
- (d) if impervious cover is transferred under Subsection (E), 40 percent.

(E) In an LA district, a person may transfer impervious cover in accordance with this subsection.

(1) Impervious cover may be transferred only:

- (a) between tracts within an LA district; and
- (b) from land with a gradient of 35 percent or less, to land with a gradient of 15 percent or less.

(2) **Land from which impervious cover is transferred may not be developed. The land must either remain undisturbed or be restored to a natural state.**

(3) A transfer of impervious cover must be described in a restrictive covenant that runs with the land, is approved by the city attorney, and is recorded in the county deed records.

Remedy Analysis: Describe what the Work Group recommends to address the issue.

- Create a Lake Austin Overlay District that applies to all property within 1,000 feet of the shoreline, regardless of how the property is zoned. The Lake Austin Overlay District regulations would include the detailed regulations currently specified in 25-2-551.
- Re-educate the staff of all City departments and entities (such as Austin Water Utility) about the Lake Austin Overlay District regulations, and how the regulations help protect the quality of our drinking water supply.
- Prohibit requests for up-zoning LA property until the Overlay District is created and staff is re-educated on how it applies to requests for zoning and applications for development.

Interests Considered for LA Zoning Issues

Interests (Unmet Needs)	Options That Achieved Consensus
<ul style="list-style-type: none"> • Preserving certain environmental protections for the Lake Austin area (such as setback from shoreline, limits on removal of vegetation and impervious cover limits) that currently exist within the LA Residence District) regardless of zoning changes. • Preserving the rights of residents whose property has been grandfathered. • Not just encouraging very large, very expensive residences. • Protecting the environment of the entire watershed, not just the area within 1,000 feet of the shoreline. • Not letting the perfect be the enemy of the good enough. • Protecting the existing high quality of the water in Lake Austin. 	<p>There were no consensus recommendations for this issue.</p>

All Other Brainstormed Options for LA Zoning Issues

- Create a Lake Austin Overlay District that applies to all property within 1,000 feet of the shoreline, regardless of how the property is rezoned. The Lake Austin Overlay District regulations would include the detailed regulations currently specified in 25-2-551.
- Re-educate the staff of all City departments and entities (such as Austin Water Utility) about the Lake Austin Overlay District regulations, and how the regulations help protect the quality of our drinking water supply.
- Prohibit requests for up-zoning LAT property until the Overlay District is created and staff is re-educated on how it applies to requests for zoning and applications for development.
- Limit the size of houses in relation to the lot size.
- Prohibit up-zoning in the Lake Austin Residence District.
- Increase enforcement of the Land Development Code in the Lake Austin area.

- G. Create an Overlay District and have the City reconsider what LA zoning means, i.e. what makes for reasonable restrictions given the current state of the environment and technology?
- H. Re-evaluate the Lake Austin District zoning requirements using the current regulations as a starting place. Ask if these standards are still appropriate given changes in technology, land use, the environment and other concerns. Determine what is appropriate and go through the normal public process for any changes, including review by the Environmental Board and the Planning Commission.
- I. Do the Lake Austin Overlay with a 1,000 foot setback.
- J. Maintain a 75 foot setback and the Lake Austin Residence District vegetation requirements if you upzone.
- K. Create a Lake Austin Overlay District and maintain grandfathering for lots permitted before 1982.
- L. Create a Lake Austin Overlay District that only applies to residential rezoning, not commercial.

Issue: Coordination

Work Group Report

(PPC3) Authority over different aspects of managing the lake is not well understood by staff or management (and, consequently, the public).

(PPC6) There is inadequate legal guidance for staff and decision-makers in regard to navigation stream law, state water codes, and local authority.

(PPC8) There is little to no coordination among City departments in setting policies that affect Lake Austin; in planning, reviewing, or inspection of development in and along the lake, or in managing recreational and commercial use of the public lake and lands.

(PPC10) Evaluate and clarify the role of Parks Board, Environmental Board, Zoning and Platting Commission, and Board of Adjustments in the development review process and variance requests.

Problem Analysis:

- See summary of LDC regulations, oversight, and variance procedures.

Remedy Analysis: Describe recommendations to address the issue.

- City Law needs to identify or cultivate one or more resources who have appropriate knowledge and experience in navigation stream law and Federal and state water codes to advise staff and the Boards/Commissions and City Council on policies and decisions related to managing the lake.
- Establish a Lake Management Division with a cross-functional team led by a director with lake management experience to provide comprehensive oversight of all the policies and procedures that affect the Lake Austin watershed. This division would include planning, regulation and oversight of facilities and commercial uses along and within the lake, development within the watershed boundary, and managing recreational use.

- Consider consolidating the functions of the BofA and the ZAP to have one Board/Commission that uses appropriate Findings of Facts for considering variances to all regulations that affect the Lake Austin watershed. In the interim:
 - All requests for variances from LDC 25-2 Use and Development and Article 13 Docks, Bulkheads, and Shoreline Access should be determined by the Board of Adjustment (currently some requests go to the PARB).
 - All requests for zoning or rezoning within the Lake Austin Watershed are reviewed by the Zoning and Platting Commission, which makes a recommendation to the City Council. (as currently done)
 - All requests for variances from the environmental regulations, including CEF protections, shoreline relocation, drainage, lake fill, and construction on slopes are reviewed by the Environmental Board, which makes a recommendation to the Zoning and Platting Commission. Decisions of the ZAP may be appealed to the City Council. (currently some requests go to the PARB and some to the BofA)

Interests Considered and Consensus Options for Coordination Issues

Interests (Unmet Needs)	Options That Achieved Consensus
<ul style="list-style-type: none"> • Protect public safety. • Clarity of processes, rules, roles and responsibilities • Efficiency and effectiveness • Active management of Lake Austin as a resource • Protecting the environment and drinking water supply • Providing adequate legal guidance • Not overburdening the public with regulations • Preserving the rights that people currently have on their property. 	<ul style="list-style-type: none"> * City Law needs to identify or cultivate one or more resource people who have appropriate knowledge and experience in navigation stream law and Federal and State water codes to advise staff and the Boards/Commissions and City Council on policies and decisions related to managing the Lake. * Establish a Lake Management Division with a cross-functional team led by a Director with lake management experience to provide comprehensive oversight of all the policies and procedures that affect the Lake Austin watershed. This Division would include planning, regulation and oversight of facilities and commercial uses along and within the lake, development within the watershed boundary, and managing recreational use. * Consider consolidating the functions of the Board of Adjustment and the Zoning and Platting Commission to have one Board/Commission that uses appropriate Findings of Fact for considering variances to all regulations that affect the Lake Austin watershed. In the interim: <ul style="list-style-type: none"> - All requests for variances from LDC 25-2 Use and Development and Article 13 Docks, Bulkheads, and Shoreline Access should be determined by the Board of Adjustment (currently some requests go to the Parks and

	<p>Recreation Board.)</p> <ul style="list-style-type: none"> - All requests for zoning or rezoning within the Lake Austin Watershed are reviewed by the Zoning and Platting Commission, which makes a recommendation to the City Council (as currently done.) - All requests for variances from the environmental regulations, including CEF protections, shoreline relocation, drainage, lake fill and construction on slopes are reviewed by the Environmental Board, which makes a recommendation to the Zoning and Platting Commission. Decisions of the ZAP may be appealed to the City Council (currently some requests go to PARB and some to the BoA.) <p>✱ Have an educational component to this process.</p>
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Issue: Boat Lift Remodeling

Interests Considered and Consensus Options for Boat Lift Remodeling

Interests (Unmet Needs)	Options That Achieved Consensus
<ul style="list-style-type: none"> • Not requiring a site plan for something as standard as a boat lift. • Concerns about safety and flood safety as a result of putting something on the lake bottom. • Because they may not be very visible, concern that they are used to add “stealth” boat slips. 	<ul style="list-style-type: none"> ✱ Treat stand-alone boat lifts like a boat dock.

Issue: Marine Toilet Regulations

Work Group Report

Work Group: Everyone (Processes, Policies & Coordination category)

Issue: (PPC5) There is no inspection of marine toilets as required under current code

Issue Detail:

The Austin Land Development Code includes the following requirements for watercraft outfitted with marine toilets:

- Watercraft cannot have a marine toilet that is capable of discharging sewage into the water (6-5-31)
- Holding tanks must be designed to prevent the removal of sewage other than by pumping to an on-shore disposal facility (6-5-32)

- Excursion boats that carry more than 20 passengers must provide separate marine toilets for men and women. (6-5-34)
- The health authority shall annually inspect a resident pleasure boat, transient pleasure boat, excursion boat, houseboat, picnic area, or marina and issue a permit indicating compliance. (6-5-36)

Problem Analysis:

- There is no one within the City who is inspecting marine toilets to ensure they are not capable of discharging sewage into the water. Verified with Austin-Travis County Health Department, Austin Water Utility, Watershed Protection Department, Planning Development & Review, Parks & Recreation Department, APD (Lake Patrol).
- Dozens of excursion boats with marine toilets operate on Lake Austin and Lady Bird Lake.
- There is one marine waste pump station on Lake Austin (located at Walsh boat ramp) and no marine waste pump station on Lady Bird Lake. The Walsh pump station provide 10 minutes of electricity for two quarters. Approximately 30,660 gallons of wastewater was pumped at the Walsh station during a six-month period in 2011.
- 1 gallon of sewage from a boat has as much bacteria as 10,000 gallons of treated municipal wastewater (<http://www.maritimesanitation.com/law.html>).
- The Federal Clean Water Act is implemented by the Texas Commission on Environmental Quality (TCEQ) which requires that watercraft with Marine Sanitation Device (MSD) be certified. Certification is indicated with a decal on the stern of the boat, but there is no inspection of the MSD or watercraft. Only 3 houseboats on Lake Austin have filed an application to certify a MSD. (Frank Espino and Cassandra Derrick, TCEQ). The Texas Parks and Wildlife Dept enforces the Texas Clean Water Act on Lake Texoma and is inspecting boats for compliance (<http://www.maritimesanitation.com/law.html>).
- The 1992 Clean Vessel Act established a federal grant program to help reduce pollution from vessel sewage discharges. It provides for installation, renovation, operation, and maintenance of pumpout and dump stations, reimbursing up to 75% of the approved project costs. The TPWD administers the Texas apportionment of the federal funds.
- The TPWD administers the Texas Party Boat Operator Licensing Program per the Texas Administrative Code (Chapter 55, Subchapter H) and Parks and Wildlife Code (Ch 31,

Subchapter G). This program addresses training and safety requirements but the application and inspections include nothing about MSDs or health concerns.

Remedy Analysis: Describe recommendations to address the issue.

- Direct the City Manager to immediately identify and have the health authority referenced by LDC 6-5-26 inspect all watercraft that have marine toilets to ensure that waste cannot be directly discharged into the water (i.e., any “Y” valves are secured in the closed position by padlock, non-resealable ties, removal of handle, or other physical barrier).
- Require commercial watercraft operators to provide proof of compliance with the Texas Party Boat Operator Licensing Program and the TCEQ MSD Certification program prior to issuing or renewing a license to operate on Lake Austin.
- Direct the City Manager to apply for a TPWD Boating Access and Boat Sewage Pumpout Grant of up to \$500,000 by the application deadline of October 31, 2013 (<http://www.tpwd.state.tx.us/business/grants/trpa/>) for the purpose of providing additional and improved boat ramp and boat sewage pumpout stations for watercraft operating on Lake Austin.
- Request the Water and Wastewater Commission to follow-up on this issue and help ensure that watercraft with marine toilets operating within the city jurisdiction are inspected by the City and that adequate sewage pumpout stations are provided on both Lake Austin and Lady Bird Lake.

Interests Considered and Consensus Options for Marine Toilet Regulations

Interests (Unmet Needs)	Options That Achieved Consensus
<ul style="list-style-type: none"> • Protect the high quality of the water. • Protect public safety for those who use the lake. • Obtain funding for the implementation of any recommendation. • Have an enforceable recommendation. • Not contradict federal or state laws that are already on the books. • Strengthen enforcement of existing laws. 	<ul style="list-style-type: none"> * Direct the City Manager to immediately identify and have the health authority referenced by LDC 6-5-26 inspect all watercraft that have marine toilets to ensure that waste cannot be directly discharged into the water (i.e. any “Y” valve are secured in the closed position by padlock, non-resealable ties, removal of handle or other physical barrier). Have the City Manager clearly identify how to report violations and to whom. * Require commercial watercraft operators to provide proof of compliance with the Texas Party Boat Operator Licensing Program and the TCEQ MSD Certification program prior to issuing or renewing a license to operate on Lake Austin. Direct the City Manager to apply for a TPWD Boating

	<p>Access and Boat Sewage Pump-out Grant of up to \$500,000 by the application deadline of October 31, 2013 (http://www.tpdw.state.tx.us/business/grants/trpa/) for the purpose of providing additional and improved boat ramp and boat sewage pump-out stations for watercraft operating on Lake Austin.</p> <p>* Request the Water and Wastewater Commission follow-up on this issue and help ensure that watercraft with marine toilets operating within the city jurisdiction are inspected by the City and that adequate sewage pump-out stations are provided on both Lake Austin and Lady Bird Lake.</p> <p>* Update and improve the pump-out station at Walsh.</p> <p>* Consider creating a second pump-out station on Lake Austin.</p> <p>* Tie the pump-out station to the RV pump-out at Emma Long Park.</p>
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Appendices

Appendix A: Work Group Report: Enclosing Boat Docks and Extraneous Appurtenances

Problem Analysis:

Current code prohibits the construction of a “living quarter” on a pier or similar structure extending into or above Lake Austin (except under a license agreement approved by the council) as per 25-2-1176(H), however, Staff is burdened with the interpretation of what constitutes a “living quarter”. The limit of what constitutes a living quarter is not so clear. The root of the issue begins with proposals to enclose one or more portions of the dock, which becomes problematic for several reasons, including, but not limited to: hazardous conditions related to the normal operation of gas powered boats, obstructing flow of floodwaters, and inability to inspect activities/hazards over public waters etc. Additionally, the simple act of enclosing other parts of the dock may then lead to conversion to living space with plumbing such as toilets, sinks, showers etc.

A related, but separate code section describes the restrictions of development within the Critical Water Quality Zones (CWQZ) in all of Austin’s water bodies. Current code allows boat docks and “necessary access and appurtenances” for boat docks within the CWQZ as per 25-8-261(C)(1), however, Staff is burdened with interpretation of what appurtenances are “necessary”. Although traditional dock appurtenances (such as a roof, storage closet, lift mechanism etc.) have historically been approved as necessary to the function of a boat dock, there has been an increase of “appurtenances” that exceed the qualifier of “necessary” (such as including enclosed rooms, plumbing, a third story, large storage facilities, kitchenettes, etc).

Cause Analysis: Describe the information that was reviewed to determine the cause of the issue.

LDC, ECM, Application Packet 19

§ 25-8-261(C) CRITICAL WATER QUALITY ZONE DEVELOPMENT

§ 25-2-1176(H) REGULATIONS

Remedy Analysis:

Better define “living quarters” and/or establish limitations for enclosed areas.

Better define “necessary appurtenance”

Better define what can be included for storage. (other cities ordinance sample for storage:

A contained storage area is allowed only within the first floor (lower deck) of a Boathouse and only for the purpose of storing items such as tackle and life jackets. Products considered

hazardous material or any material which has a warning label prohibiting its use or storage near water and/or public water supplies may not be stored in these areas. The maximum storage area allowed shall be as follows:

<i>Structure Area</i>	<i>Storage Area</i>
<i>800 to 1500 square feet</i>	<i>32 square feet</i>
<i>1501 to 2000 square feet</i>	<i>48 square feet</i>
<i>2001 to 2500 square feet</i>	<i>64 square feet</i>

Better define width of necessary access.

Appendix B: Work Group Report: Small quantity dredging

If dredging is needed but it does not require an Army Corps of Engineer's permit, meaning it is less than 10 cubic yards and is not beneath the boat dock structure, then it needs to be reviewed by City staff.

At this time it is the responsibility of the Parks Board to review (but not approve or deny) this dredging.

§ 25-7-63 REVIEW BY PARKS AND RECREATION BOARD OF CERTAIN SITE PLANS.

Remedy Analysis:

Clarify that no more than 10 cy can be dredged with a boat dock site plan and that this small quantity dredging will be inspected by WPD/ERM staff.

Currently dredging is found in 25-7, but drainage reviewers don't review boat docks, so this directive should move to clarify Article 7 of 25-8 and Title 8 of LDC.

Parks Board would like to have Environmental Board review instead.

Appendix C: Issue Analysis Template

Issue Worksheet DRAFT 2012.10.09

PROBLEM ANALYSIS

Question	Evaluation					Subcommittee tasks
Is the overall problem within the city's ability to fix?	no	no/maybe	maybe	yes/maybe	yes	If consensus is clearly no, then drop problem.
The evidence of the problem (seen by the committee) is...	nonexistent	committee's perception	stakeholder testimony	expert testimony	data	List evidence
Does the committee need more evidence?	no	no/maybe	maybe	yes/maybe	yes	Reach consensus
If more evidence is needed, it should be obtained by:	not applicable	public hearings	stakeholder surveys	outside experts	city staff	Decide plan
Relative to other problems, this problem is...	least important	less important	about average	very important	most important	Put forward to full committee for ranking
This problem affects (circle all that apply)	landowners	water quality	businesses	boaters	other lake users	

CAUSE ANALYSIS

Question	Evaluation					Subcommittee tasks
The evidence on the problem's causes are	nonexistent	committee's perception	stakeholder testimony	expert testimony	data	List evidence
Does the committee need more evidence of the causes?	no	no/maybe	maybe	yes/maybe	yes	Reach consensus
If more evidence is needed, it should be obtained by:	not applicable	public hearings	stakeholder surveys	outside experts	city staff	Decide plan
Are the causes within the city's ability to fix?	no	no/maybe	maybe	yes/maybe	yes	If consensus is clearly no, then drop problem.
The causes can be attributed to (circle all that apply)	landowners	government agencies	businesses	boaters	other lake users	
The causes are associated with ...	insufficient enforcement of regulations		insufficient regulations		lack of any regulations	

REMEDY ANALYSIS

Question	Evaluation					Subcommittee tasks
Are there proposed remedies?	no	no/maybe	maybe	yes/maybe	yes	List remedies
Are the relative costs of different remedies known?	no	no/maybe	maybe	yes/maybe	yes	List costs
Does the committee need more evidence on impact or costs of proposed remedies?	no	no/maybe	maybe	yes/maybe	yes	Reach consensus
If more evidence is needed, it should be obtained by:	not applicable	public hearings	stakeholder surveys	outside experts	city staff	Decide plan
Proposed remedies are	Funding for enforcement	Policy changes and coordination	revising regulations	writing new regulations	other	
Remedies will affect	landowners	government budgets	businesses	boaters	other lake users	
Are the remedies within the city's ability?	no	no/maybe	maybe	yes/maybe	yes	If consensus is clearly no, then drop remedy.

Appendix D: Work Group Report Template

Issue: Description of issue, as it is listed in the Issues list for each Work Group.

Problem Analysis: Describe how the problem was analyzed.

Cause Analysis: Describe the information that was reviewed to determine the cause of the issue.

Remedy Analysis: Describe what the Work Group recommends to address the issue.

DRAFT

Appendix F: Work Group Process Steps

Lake Austin Task Force

Work Group Process

Welcome to your Work Groups! Here are some guidelines for you to ensure your work proceeds smoothly.

- 1) **Identify Priority Issues.** The workgroup should discuss how to organize their issues, with input from each work group member. Work groups should also review their lists of issues to ensure that each one qualifies as an issue for the group to consider (i.e., does it fit the scope of the work group, is it an issue rather than a recommendation, etc.)
- 2) **Identify Information Needs.** City of Austin staff can provide some additional background information on an as-needed basis to help you inform your discussions. Once you've identified the issues your group will consider, be sure that your work group has the information it needs to deliberate on those issues. Make sure that the group agrees on the authenticity of the information—that it comes from reliable sources that the entire group trusts.
- 3) **Begin Discussion of Issues and Clarify Issues, As Needed.** As you begin discussing issues as a work group and review the information available on each, you may need to refine what exactly the issue is for the Task Force to investigate. This is an important step that will help streamline the Task Force's review of the work group's discussions.
- 4) **Brainstorm a List of Recommendations and/or Solutions for the Work Group's Issues.** Work group members should each have the opportunity to present solutions or recommendations for the work group to consider on each issue. This can be done via email or during work group meetings; the important thing is for each member to feel they have the opportunity to present their ideas.
- 5) **Discuss Potential Recommendations for Task Force To Consider.** The work group can offer a set of proposed recommendations to the Task Force or multiple options within a given recommendation from which the Task Force can choose as its official recommendation. As the work group reviews proposed recommendations, those that the work group chooses to put forward to the full Task Force as proposals should have the support of all work group members to the greatest extent possible. Work groups do not need to take formal votes on their proposals, but they should strive to achieve consensus within their work group on a proposed recommendation for the Task Force.