



January 2022

White Rock Lake Park Operations & Maintenance Plan

Park Maintenance Operations Division
DALLAS PARK & RECREATION DEPARTMENT

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1. PURPOSE

Park Maintenance and Operations Division is responsible for the land management and maintenance of White Rock Lake Park and its diverse facets. This document is intended to serve as a comprehensive guideline for the maintenance and operation of White Rock Lake Park that is consistent with prior planning efforts, maintains the Health, Safety, and Welfare of the Public, preserves the environment, facilitates recreational use, incorporates best practices, and allows for efficient maintenance operations.

Prior maintenance planning documents have been referred to throughout this document and maintenance managers should familiarize themselves with these plans in order for maintenance practices to stay consistent with officially adopted plans. However, the maintenance manager should also recognize that best practices, methods, and materials change over time. Therefore, maintenance operations should balance the incorporation of prior maintenance plans while continually adopting new industry best practices that suit Department objectives. Upcoming park improvements, re-development projects, and operational changes will also shape maintenance operations.

As such, this guide should be considered a fluid document and updated as needed through future editions. This guide was developed in collaboration with city staff, park board members, and the WRL Task Force. Future updates to this guide should also involve collaboration with these individuals and entities.

2. SHORELINE MAINTENANCE

White Rock Lake Park features approximately nine (9) miles of shoreline. It is important to ensure proper vegetation management for the sustainability of the shoreline. Bank stabilization and erosion control are two primary objectives of shoreline management. These objectives can be challenging to achieve when coupled with other objectives such as maintaining recreational access and managing natural resources within an urban environment. The 1987 Management Plan states the following:

“The development of a bank stabilization and shoreline retention program has been considered in order to reverse the current damaging erosion condition. An urban shoreline

system, while perhaps more durable than the nature system may preclude the preservation of the lake-edge habitat zone. A coordinated dialogue between park planners and local environmental experts and organizations shall precede any design of an urban shoreline retention system.”

Since shoreline maintenance includes, but is not limited to, bank stabilization, erosion control, providing recreational access, providing wildlife habitat, and conserving natural resources, a management strategy must be employed that is in tune with the diversity of vegetation types and uses around the lake (Appendix H.VI.).

- a. Management Strategy – It is the intention of the Park and Recreation Department to maintain the unique land use zones and classifications defined in the 1987 Management plan (Appendix I) and subsequent plans which delineate minimal use to high-intensity recreation use areas (Appendix H.VI.i). Invasive vegetation that causes risk to human health and safety should be evaluated case-by-case for removal. Bank stabilization, erosion, drainage, pollution, safety, environmental concerns, habitat preservation, and recreation access are some important factors to consider in shoreline vegetation management. Vegetation management should be performed strategically in non-contiguous sections for minimal environmental impact. Where feasible, planting or erosion control measures should be included in individual vegetation removal plans. Vegetation removal around the shoreline should be conducted in a manner that does not leave bare soil areas unmitigated. Thinning and cutting back vegetation should be done in a manner that allows seasonal re-growth and retention of root systems of desirable plants and trees to facilitate ongoing bank stabilization. Citizen requests for vegetation removal or thinning for aesthetic reasons should only be done insofar as it works with the overall management strategy and does not result in a variation in practices that are not appropriate, such as land clearing along the shoreline. At times, citizen requests may need to be denied if they conflict with management objective or timed appropriately. The public can be referred to this Plan if needed.
- b. Natural shoreline areas - natural areas as identified White Rock Lake Typology Maps (Appendix H.III-V.) are typically unmaintained for trees and vegetation unless emergency or

hazard deems that maintenance is necessary on a case-by-case basis and will typically be to deal with invasive species, as identified in *Master Invasive Species List for White Rock Lake* (Appendix F.)

- i. Shoreline vegetative buffer zones 6 to 9 feet into the water and 6 to 9 feet inland.
- c. Trees - In cases where volunteer trees have matured, it is a best practice to leave that tree in place (unless the tree has become a safety hazard). Trees larger than 3 inches in diameter should be assessed by an International Society of Arboriculture (ISA) Certified Arborist as well as the Park Urban Biologist prior to removal. Removal should occur if the tree is deemed a concern because it is hazardous or invasive and removal may require replanting or other erosion control measures occur. Removal is *ideally* performed during the winter months.
- d. Shoreline Turf – shall be maintained to the water line at a height of 3 inches to 6 inches in height. Seasons and proximity to natural areas may warrant mowing at the higher heights within the approved range.
- e. Nesting and Wildlife Birds – to minimize nesting disturbance, routine & non-routine vegetation removal should be conducted from mid-June to mid-February. But during the nesting season from mid-February through mid-June vegetation removals will need to be vetted through the Urban Biologist to ensure nesting and other habitats are not disturbed.
- f. Mammals – monitor for small beaver dams that could clog drainage channels. Report all dams to Park and Recreation Urban Biologist to determine if removal efforts are required. For any other additional wildlife concerns in the park please contact Urban Biologist.
- g. Aquatic Vegetation - Aquatic vegetation should be restricted to specific areas to keep some level of control, so it doesn't overtake fishing and boat doc areas, or in areas it might collect trash, impede, flow, restricting recreational opportunities. Aquatic vegetation along the shoreline is often useful to aid bank stabilization efforts. Generally, park maintenance is currently

limited by a lack of specialized aquatic equipment to adequately manage aquatic vegetation control.

- h. Litter Standards - Shoreline clean-up consists of removal of all litter, floatables, paper or plastic, cans, cups, or other non-natural items within six (6) feet of where the water meets the ground also known as the shoreline. This should be conducted *at least* weekly. Services may be increased or decreased as usage demands, but always as budget allows. Litter should be removed as far as 6 feet into the water. Visual litter inspections should ideally be conducted 3 times per week for the shoreline.
- i. INTEGRATED PEST MANAGEMENT- All pesticide usage plans should follow established communication procedures (See SECTION 36).
 - i. Emerging – May be allowed to grow as identified in White Rock Lake Typology Maps (Appendix H.III-V.). Mechanical removal for all other areas is recommended during the non-nesting season. Chemical control may be an option if deemed necessary in accordance with TDA guidelines, TCEQ guidelines, and White Rock Approved Chemical List (Appendix G).
 - ii. Submersed - Chemical control may be an option if deemed necessary in accordance with TDA guidelines, TCEQ guidelines, and White Rock Approved Chemical List (see Appendix G).
 - iii. Floating - Chemical control may be an option if deemed necessary in accordance with TDA guidelines, TCEQ guidelines, and White Rock Approved Chemical List (see Appendix G).
 - iv. Algae - Chemical control may be an option if deemed necessary in accordance with TDA guidelines, TCEQ guidelines, and White Rock Approved Chemical List (see Appendix G). Algae treatment will not likely be deemed necessary at White Rock Lock.
 - v. Fire Ants – Chemical control may be an option if deemed necessary in accordance with TDA guidelines, TCEQ guidelines, and White Rock Approved Chemical List (see Appendix G).

3. CREEK MAINTENANCE

- a. Turf heights - Where possible maintain a 6-foot buffer and do not mow with a standard 2 to 3-inch height right up to the edge of the bank drop-off. The buffer should be maintained at 6-10 inches in height.
- b. Erosion control- Maintaining recommended turf heights and buffer zones will help reduce erosion and provide nesting cover (where practical—in minimal use areas).
- c. Trees and shrubs- In forested riparian areas, maintain tree cover within 6 feet of the shore. Introduction of known non-native, invasive species should not be encouraged even for erosion control. Plan to reintroduce native understory vegetation as invasive species are removed.
- d. Vegetation removal- Vegetation removal should never leave erosion concerns from bare soil addressed. Use a full suite of IPM practices (see Section 37) to discourage invasive species. Generally, the same principles of shoreline maintenance should be applied to creek maintenance.
- e. Creek Litter and Debris- Litter control is generally discussed in section 5.c., however it should be noted that many areas of the creeks are inaccessible by equipment and known to accumulate trash. Working with volunteer groups to help with inaccessible areas has proven effective to some extent and is an opportunity to further explore with assistance of the Community Program Coordinator. DWU Stormwater Division will assist with removing build-up of natural debris such as fallen limbs and logs, but park maintenance may need to initiate contact with DWU for this to occur in creeks that are within the park.

4. GENERAL TURF MAINTENANCE

- a. Equipment – Finish cut mowers (zero-turn or out-front mowers), production finish mowers, line trimmers, backpacks, aerators, spray rigs, tractors, bobcat, front end loader, various heavy equipment attachments, and other equipment.

- b. Turf Heights – 3 to 4 inches, seasonally determined by temperatures with higher heights being sought closer to winter and during higher temperatures.
- c. Follow procedures for shoreline and creek maintenance when near environmentally sensitive areas to protect creek/lank banks and other waterways with sensitive habitat.
- d. Service frequency and season – Mow/trim services will be conducted during the growing season of March thru December (when turf goes dormant depending on when ground temperatures reach 55 degrees Fahrenheit), ideally no more than 14 -days between cycles with a good turf management program. Since chemical use is discouraged at WRL, 7-day mowing cycles are preferred.
- e. Soil health and amendments-
 - i. Organic compost may be applied to recreational greenspace of general turf areas for nutrient replenishment. It is imperative that the Planning and Design engineers be consulted regarding any desire to add large amounts of dirt for top dressing due to this park being in a flood plain.
- f. INTEGRATED PEST MANAGEMENT - All pesticide usage plans should follow established communication procedures (See SECTION 36).
- g. In General – Turf maintenance should follow the Turf Management Plan (Appendix B) and be adapted to the relevant vegetation zone (Appendix H.6.iii.).

5. GENERAL LITTER

- a. Service Scope – General litter pertains to any waste generated outside of the shoreline buffer, natural, wildflower or prairie areas. Waste receptacle servicing is included in this scope.
- b. Frequency – Litter should be scheduled for a minimum of 4 days per week during the off-season and frequency is *subject to funding*

levels. Frequency may be increased as usage demands but only as budget allows.

- c. Litter Boom – Litter booms may be installed at smaller creek branches that feed into the lake such as in Williamson Branch where it feeds into White Rock Lake between W. Lawther Dr. and the White Rock Lake Trail, along with the Dixon Branch. The purpose of a litter boom is to filter and capture floatables where they are easily accessible to keep them out of the main body of the lake. Litter boom servicing should adhere to normal litter removal standards as stated in Section 5.b. It is not prudent to use conventional litter booms in major branch channels as the force of water and amount of large debris cannot be withstood and the boom will break open, nor should litter booms be used in a manner that impedes water flow or large objects. Use of litter booms should always be vetted through the Department of Water Utilities.

- d. Enhanced Services for Holidays- it is imperative to modify schedules during the following holiday periods to ensure services are scheduled for the litter contractor and internal litter teams. This includes possibly allowing earlier start times as well as supplemental pickups if deemed necessary by activity trends.
 - i. Easter Weekend
 - ii. Memorial Day Weekend
 - iii. 4th of July
 - iv. Labor Day

6. RECYCLING SERVICE

- a. Service scope - All recycling receptacles at White Rock Lake Park need to be serviced. Receptacle liners should be replaced with transparent liners (ideally blue). Recyclables should be separated from general waste as much as possible prior to disposal. Recyclables must be disposed of in a recycling dumpster with weight of contents being recorded by the bag. Bag quantities should be added to the work order prior to closing the work order. The number of bags recorded will then be converted into total pounds or cubic yards.

- b. Frequency - weekly cycles at *minimum*. Increased services may be warranted as usage increases but only as funding allows.
- c. Second Saturday Recycling Cleanup Events – Every second Saturday, *For the Love of the Lake* hosts a shoreline cleanup event for removing general litter and recyclables in the shoreline buffer zone of the park. Full bags are removed and left along the shoreline to be removed by the litter contractor for general litter. Recycling bags are distinct from general litter by blue bags. Internal park staff are to collect the blue bags after the events, record quantities of recyclables, and transport recyclables to the recycling dumpster located at the park service center.

7. PRAIRIE MANAGEMENT

This will vary by prairie unit conditions (2016 prairie assessment) and annual conditions. In very general terms: Excellent rated areas (~21% of the area) will be mowed 1-2 times a year, Moderate areas (~60% will be mowed 2 times a year), and Poor units (~19% of the area) may be mowed up to 3 times a year. The density of Johnsongrass and Queen Ann’s Lace will dictate timing of the mowing, which is dependent on Spring season temperatures. The one constant mowing cycle is the July 4th mow cycle. Beyond that, alternate between a growing season mow (after the 3rd week in October to account for Fall monarch migration) or a late winter/early growing season mow (allow for spring release of early blooming wildflowers for Monarchs).

- a. Other maintenance considerations: During dry years, there may be a need to reduce grass height in July/August and/or December/January to reduce wildfire hazards near residential years. When mowed, the cut height should be held at 10-12 inches. Selective use of herbicides may be used to help control non-native invasive species (ex. the use of *Plateau* on Johnsongrass). Woody species should be cut and chemically treated as practical to avoid woody species encroachment.
- b. Prairie volunteers- Volunteers can help in various other aspects of prairie management. Principally they can help with the following: collection of simple biological survey data, collection and dispersal

of locally sourced native seeds, and the manual removal of invasive species (ex. Pulling Queen Ann’s Lace). The Urban Biologist advises and provides oversight of vegetation management in collaboration with the White Rock Lake Maintenance Staff District. Volunteers can work with the Urban Biologist to participate in the Adopt-a-Prairie Program (Appendix D).

- c. INTEGRATED PEST MANAGEMENT - All pesticide usage plans should follow established communication procedures (See SECTION 36).

8. DAM MAINTENANCE

Dam maintenance is conducted by Dallas Water Utilities and the following section is included for reference.

- a. Inspections- Conducted by Dallas Water Utilities
- b. Mowing- Conducted by Dallas Water Utilities
- c. Tree management - Conducted by Dallas Water Utilities
- d. Spillway graffiti – Conducted by Dallas Water Utilities. Reports graffiti on the spillway wall should be reported to Michael Villarreal at Michael.Villareal@dallascityhall.com.

9. DRAINAGE DITCH MAINTENANCE

- a. Scope of Service – Monitor for beaver dams which can cause extended flooding post-flood event. Look for debris and mud mounds in drainage ditches and tree lines. Prolonged drainage may be an indicator of the need for inspections. Areas historically prone to this issue are:
 - i. Stone Tables
 - ii. Creek near T&P Hill
- b. Frequency – inspect annually.

10. WILDFLOWER AREAS

Wildflower areas are a valuable tool for providing habitat for pollinators and also reducing total mowing area for ~3 months. Where practical, preparation of wildflower areas should start in October or November. TxDot guidelines that are used city-wide for wildflower plantings can be used at White Rock Lake Park. Generally speaking, site prep will include a chemical application to eliminate invasive weeds and seedbed preparation. A blackland prairie seed mix, approved by the DPRD Urban Biologist, can be lightly scraped to ensure seed to soil contact.

Most of the wildflower areas will be in bloom by mid-March or early April and can be in place until-June 15th -July 1st. Most of the wildflower areas should start being inspected for current conditions starting May 15th, and most will be ready to be mowed June 15th -July 1st. Timing is dependent on soil moisture, weather condition, and invasive weed pressure. Some things to look for: Is there still a variety of colors? Has the area become dominated by an invasive species (specifically Johnsongrass or nonnative thistles), or getting multiple complaints? If in doubt, contact the Urban Biologist. Most complaints will be related to the abundance of Johnsongrass which may be in active growth by June 15th. Consider chemically treating for Johnsongrass with a narrow-spectrum herbicide when practical.

- a. Maintenance – Mowing of wildflower areas shall be conducted *at least* annually and typically in the mid-summer after the seed drops. Mow with a large-area, rough-cut mower but *only* after the site has been inspected by the Park Urban Biologist. The Park Urban Biologist *must* approve all wildflower area mowing and any other type of maintenance such as chemical application.
- b. Volunteer efforts related to wildflower areas must be managed in collaboration with Park Urban Biologist, as is done with Prairies.
- c. INTEGRATED PEST MANAGEMENT - All pesticide usage plans should follow established communication procedures (See SECTION 36).

11. NATURAL AREAS

In general vegetation management efforts should follow the 1987 Management Plan objective:

“Native and indigenous vegetation will be maintained and restored whenever possible to provide a stable groundcover and canopy to enhance the park as a unique urban resource. Wildflower and native grass areas will be preserved against encroachment and uses which endanger their existence. An extensive reforestation program will be instituted to replace deteriorating trees and to ensure the existence of mature tree cover in the future.”

This objective should be incorporated into maintenance of the park’s lake shoreline, creeks, prairies, wildflower areas, urban forest, and other natural areas.

- a. No Mow Areas (non-prairie or wildflower)—Plan on mowing once or twice a year. Consider treating for Johnsongrass if threshold is surpassed.
- b. INTEGRATED PEST MANAGEMENT - All pesticide usage plans should follow established communication procedures (See SECTION 36).

12. OLD FISH HATCHERY

- a. Short-term
 - i. Monitor for Johnsongrass, privet, chinaberry, and Chinese tallow tree and remove in accordance to BMP/IMP standards (volunteers with technical aspects handled by Park staff).
 - ii. Identify the native vegetation that may already be in the area (i.e., the hatchery pond areas on the lake side of the clearing), and simply encourage that.
 - iii. Park and Recreation Urban Biologist to oversee scope of work for restoration and management and Oncor’s vegetation standards.
 - iv. Identify the first 1/3 to restore starting in Spring 2021 with local birders to establish a list of species observed in the area (powerlines and adjacent Fish Hatchery).

- b. INTEGRATED PEST MANAGEMENT - All pesticide usage plans should follow established communication procedures (See SECTION 36).
- c. Long term
 - i. Creation of an overall vegetation management plan that emphasizes grasses, shrubs, and shorter vegetation that are native to grasslands and forested wetlands, specifically native to the ecoregion.
 - ii. Partner with Oncor on the vegetation management plan so the city meets its objectives related to bird and pollinator conservation, and Oncor meets its vegetation standards along the power lines. City of Dallas Urban Biologist recommends Oncor should actively remove fast growing invasive species of trees at least every 5 years as needed. An adoption-type program with volunteers should be considered.
 - iii. Add interpretive elements related to wetland ecology, riparian areas, pollinators, and birds.
 - iv. Remove invasive species and discourage establishment.
- d. Memorandum of Understanding – a joint use agreement should be established to outline the management details of the fish hatchery area to include:
 - i. Park and Recreation as the managing department
 - ii. Agreement purpose and background
 - iii. Outline and details of administrative, coordination, maintenance, and communication plans and responsibilities of each partner
 - iv. Renewal Terms
 - v. Risk Requirements vi. Pertinent addendums
- e. In general - Maintenance of the Old Fish Hatchery area should conform to its status as a minimal impact area under the 1987 Management Plan for White Rock Lake Park (pages 14-15) and as an environmental preserve under the 1994 White Rock Lake Park Design Guidelines (page 13) (Appendix I).

13. ORNAMENTAL BEDS

- a. Design strategy – is recommended that perennial, drought-tolerant, and water-wise plant material be used in ornamental landscaping around the lake suitable to North Texas from the Approved Plant List (Appendix E). Drip irrigation is preferred. It is important to factor in shade and sun requirements of plant material used that is suitable to the area. Plant material that is conducive to pollinator and migratory efforts, such as monarch waystations, is ideal for use in ornamental beds in White Rock Lake Park. In general, locations for ornamental bed installation should follow the vegetation type criteria and guidelines in the *White Rock Lake Design Guidelines* (pages 55-56) (Appendix H.VI.iii).
- b. Maintenance frequency – Bi-weekly (twice per month) services of ornamental beds for weed removal and plant health checks should coincide with mowing cycles.
- c. Plant maintenance – Once per year, depending on plant specifications, perennial cutbacks should be performed during the winter months after the first hard freeze of the season. Plant material around marquee or identification signage should be maintained/trimmed to ensure sign visibility. Shrubs may require trimming multiple times during the growing season to ensure safety and containment according to design.
- d. Mulching – Hardwood mulch (not dyed) should be installed to maintain a 2-inch to 4-inch depth. This usually requires mulching at least once per year to adhere to depth standards. It is also imperative to maintain mulch to ensure that drip irrigation is covered and never exposed. Tree root flares should not be covered with soil or mulch and should be left exposed. If tree root flares are covered, tree health can be negatively impacted.
- e. Weed pressure thresholds - 10% weed pressure is the maximum amount that will be tolerated in ornamental beds prior to control action. Adhering to maintenance frequency of mechanical control would likely keep thresholds far below this maximum threshold.

- f. Soil health and amendments – It is recommended that soils be amended as needed in high-visibility beds with material such as organic compost, humus, etc. Application needs are determined by pH levels and plant health. High-visibility beds include beds around marquee signs, park ID signs, and areas adjacent to major gateways such as the Spillway. Consider using native plant material to avoid the need to raise or lower soil Ph levels for non-native species.

- g. INTEGRATED PEST MANAGEMENT – mulching, composting, routine maintenance for weed removal, and pH testing of soil satisfy most of the INTEGRATED PEST MANAGEMENT demands for ornamental beds. If chemical control is needed, chemicals listed in Appendix G are approved for control as labeled. All pesticide usage plans should follow established communication procedures (See SECTION 36).

14. FURNISHINGS

It is important to standardize furnishings and amenities according to approved design guidelines.

- a. Furnishing replacement plan - If design standards change over time, it is not budgetarily feasible in most cases to consolidate and update all furnishings in a single budget year. Therefore, a replacement schedule must be created to ensure compliance in a set timeline. Replacement plans are also needed as determined by the useable life of the amenity. All replacement plans should be based upon the most current inventory assessment.

- b. Site furnishings list- see Park Design Standards and White Rock Lake Park Design Guidelines (pages 59-67) (Appendix I).

- c. Annual park inventory assessment – inventories of furnishings at the park should be conducted annually to include items such as, but not limited to, items such as: furniture type, installation date, current condition, standard compliance, replacement priority, etc. Replacement plan should include cost of furnishings and may span over multiple years if needed.

- d. Review and update of replacement plan – this should coincide with annual park inventory assessment.
- e. Purchasing for installation – it is important to procure large furnishing orders in bulk at the beginning of each fiscal year. If deliveries are typically prolonged for a particular furnishing, on-hand inventory may need to be what is assigned in year one of replacement plan. Year 2 items may be purchased at the beginning of Year 1 to ensure goods are delivered and ready for installation during the winter of Year 2 (towards beginning of fiscal year).
- f. Maintenance and installation
 - i. Installation standards – always follow current departmental standards and plans in conformance with manufacturer supplied installation specifications.
 - ii. Maintenance – furnishings should be inspected for graffiti, damage, safety concerns, and vandalism on funded service level frequencies which is currently *monthly at minimum*.
 - iii. Historic furnishings – materials and methods used for maintenance of historic site furnishings should be done in consultation with Planning & Design. While White Rock Lake Park’s only local landmark designation is the Bath House, other sites and structures such as the Stone Tables and Buildings around the lake have a historic character and significance. Materials and methods used for maintenance and repair of the Bath House should be done in consultation with the Office of Historic Preservation.
 - iv. INTEGRATED PEST MANAGEMENT – only mechanical controls and approved organic pesticides (see Appendix G) are to be used near picnic tables. Picnic table area pest management should be 100% organic. See Section 36 for communications protocols.
- g. Park Memorial Benches – The department’s memorial bench and plaque policy should be followed in coordination with the donor and CPC. Benches should be situated in a location that is publicly accessible, conducive to maintenance, and spaced appropriately from other benches in accordance with design guidelines. Bench models should conform with current park standards and installed on a concrete slab.

15. PLAYGROUND MAINTENANCE AND INSPECTIONS

Playgrounds should be maintained to ensure the conveyance of a safe, diverse, and playful environment for various age groups.

- a. Audit- To be performed by a Certified Playground Safety Inspector (CPSI) after replacement of any major component such as a slide or change in state or federal regulations.
- b. Visual Inspection – Bi-weekly (twice per month) inspections conducted with work order system checklist.
- c. Maintenance – Includes maintaining appropriate ASTM fibar levels in fall zone areas (bi-weekly assessment required); replace general wear parts such as brackets, seats, or chains; leveling displaced fibar in fall zones; keeping ADA entrances into playground free of debris or obstruction and blowing off surrounding sidewalks to keep free of debris (displaced fibar should be redirected back into playground surfacing).
- d. INTEGRATED PEST MANAGEMENT – only mechanical controls and approved organic pesticides (see Appendix G) are to be used in playground areas. Playground pest management should be 100% organic.
- e. Installation (non-capital) – Major installations or replacements should be performed as a safety priority with proper installation expertise. Installations of this nature may require a playground audit by a CPSI.

16. FORESTRY MAINTENANCE

Trees are managed in Dallas parks beyond the function of aesthetics and shade offerings. Trees play an important ecological and environmental role in the park system and City. The benefits of trees are numerous, and the canopy of White Rock Lake Park serves as a sanctuary for wildlife and citizens, alike. As such, trees are an essential part of White Rock Lake Park.

Unfortunately, damaged, and declining trees can pose significant risks to people and property. Therefore, regular preventative maintenance is so important. In accordance with ANSI standards and ISA Best Management Practices, preventative tree pruning will take place during the dormant season (Nov.-Feb.) with emergency removal needs being determined case by case. Dead, dangerous, and declining trees will be identified by staff and assessed by a Certified Arborist. Additionally, these trees will be inspected by the Urban Biologist (or trained designees) to determine wildlife impact. Once cleared for removal, trees will be removed in a timely manner. Assessments will be made to determine possibility of leaving downed trees and safe snags in natural areas for wildlife habitat purposes.

- a. Inventory - Inventory trees by species and current condition. This endeavor may take several years as staffing levels and priorities allow and should be done in collaboration with the Urban Forester.
- b. Pruning and general trim - Develop a proactive pruning plan between Park Maintenance District and Forestry staff. This schedule should be placed on the Forestry Maintenance Calendar for the Division.
- c. District Arborist – This staff member should be a supervisor within Park Maintenance District 1 who holds a current certification as an ISA Certified Arborist. In the event there is not a certified Arborist within Park Maintenance District 1, an Arborist within Park Service Area 1 will assist.
- d. Annual Assessments- The District Arborist will annually evaluate tree maintenance needs for White Rock Lake Park and provide recommended maintenance to the Forestry Approval Team consisting of: Park District 1 Manager, Park Forester, Park Forestry Manager, and Park Urban Biologist for approval. It is encouraged that the Arborist invite the Forestry Approval Team to be part of the assessment process. Once approved, the District Arborist will submit the annual maintenance plan to the Forestry Supervisor prior to November to schedule work for the winter months in accordance with this section. Winter Tree Pruning and Removal work should be considered a sensitive environmental project and be communicated per the procedure in Section 36.

- e. Snags - maintain standing snags where safe and practical (near or in natural areas with natural lean into the natural area).
- f. New plantings - strategically consider planting of new trees. There are several trees near the end of their life that necessitate reforestation efforts over time. New plantings should not minimize or significantly reduce the open space recreational areas nor the prairie or wildflower areas.
- g. Beautification Agreements – are to be considered when looking into areas that have these types interests’ groups. Ex: Celebration Tree Grove.
- h. Notification of Tree Removals – With the exception of emergency removals, details of tree removal locations should be given to the Park Board Member and *WRL Task Force* in advance of the work. If residences will be impacted from tree removals due to work near roads, address notification should be given 2 weeks in advance of the work.
- i. *White Rock Lake Shoreline Tree and Shoreline Enhancement Plan* (1991) (Appendix I) – This plan inventoried trees and invasive species around the lake along with proposing reforestation principles and projects. While the principles of this plan are good to reference, always consult with the Urban Forester and Urban Biologist before proceeding in re-planting and invasive species removal efforts. A City-wide Urban Forest Master Plan is currently being worked on and will cover White Rock Lake Park as well.

17. IRRIGATION

Irrigation is only intended to supplement natural rainfall to meet plant watering requirements. Water is supplemented weekly on a case-by-case basis with specialized exceptions evaluated on a case-by-case basis. Examples of exceptions include, but are not limited to, watering in new plant material or athletic fields.

- a. Ornamental beds – drip irrigation is ideal for ornamental beds.

- b. General turf and athletic fields – smart irrigation concepts should be incorporated including, but not limited to rain/freeze sensors, flow meters, pressure compensating heads, and check valves.
- c. Tree plantings – new trees are ideally irrigated with bubblers or drip irrigation.
- d. Water sources – water access and adequacy will need to be evaluated six (6) months in advance of any project completion deadline to allow for permitting and delivery service process.
- e. Inspections – assess functionality of systems on a quarterly basis and schedule repair needs accordingly.
- f. Scheduling – comply with local guidelines regarding watering restrictions. Exceptions may be granted through water variances through Dallas Water Utilities.
 - i. Various water-efficient schedules may be used to minimize evapotranspiration (ET).
- g. Irrigation winterization – sprinkler systems should be shut down and laterals drained. Active above ground components should be insulated.
- h. INTEGRATED PEST MANAGEMENT – Inspections, scheduling, and irrigation materials should be optimized to minimize water-waste and run-off which will help conserve water and minimize weed growth.

18. DOG PARK MAINTENANCE

- a. Litter Services
 - i. Performed by contractor 5-day *minimum* service cycles with 4-day *minimum* service cycles during the winter months are recommended subject to funding levels.
 - ii. Recycling receptacles - Inspected for service twice weekly. Recyclables are to be separated from general waste as much as possible prior to disposal. Recyclables must be disposed

of in a recycling dumpster with weight of contents being recorded by the bag. Bag quantities are to be added to the work order prior to closing the work order. The number of bags recorded will then be converted into total pounds or cubic yards.

- b. Mowing Standards-General Turf Maintenance
 - i. Equipment – Finish cut mowers (zero-turn or out-front mowers), line trimmers, edger, and blower.
 - ii. Turf Heights – 3 to 4 inches, seasonally determined by temperatures with higher heights being sought closer to winter and during higher temperatures.
 - iii. Service frequency and season – Mow/trim services will be conducted during the growing season of March thru December (when turf goes dormant depending on when ground temperatures reach 55 degrees (Fahrenheit), on a 7 - day cycle with a good turf management program. Without a balanced chemical program, 7-day mowing cycles are ideal. Mow/Trim operations are scheduled for every Monday during the growing season.

- c. Pet waste station (dispenser)
 - i. Bag stocking – check twice per week and refill as needed.

- d. Pavilion and Shelters
 - i. Check for corroding columns.
 - ii. Rinse or power-wash pavilion as needed on maintenance days.
 - iii. Remove tape, ribbons, etc. from events.
 - iv. Inspect kiosk for structural integrity and relevant materials on weekly basis during maintenance days.

- e. Fences and Gates
 - i. Check for corroding poles and hardware weekly during scheduled maintenance day for dog park.
 - ii. Ensure fabric is properly fastened; refasten as needed
 - iii. Ensure gates are properly functioning and latching. Replace parts as needed.
 - iv. Touch up with paint as needed.

- f. Dog Launch Area
 - i. Flooding- remove debris as water levels subside and render debris accessible until launch is free of post-flood debris. This may take several days as the water levels drop. After a flood event, this area must be checked *daily* and scheduled for debris removal as access to debris becomes possible until ALL flood debris is removed.
 - ii. Deflector boom - check for functionality and that both ends are secured or properly fastened. Repair and replace as needed.

- g. Park Closures
 - i. Closing Process (this process is intended to serve as a guide to be used by the Lake Supervisor) -The City of Dallas Weather Condition Line website is updated by the White Rock Lake Grounds Maintenance Supervisor with the Dog Park status first thing in the morning of maintenance.
 - 1. Log into website
<https://rainoutline.com/search/dnis/2146146711>
 - 2. Find White Rock Lake Dog Park on the page listing and follow the link
 - 3. The next page will take you to a short menu of “open” (green) and “close” (red) status. Select appropriate link to update status.
 - ii. Weekly Maintenance (every Monday) – Day of the week when all routine, general maintenance should be performed. Gates should remain locked during maintenance activities on these days.
 - iii. Annual Maintenance - 2 weeks in October (fall closure) and 3 to 5 weeks in April (spring closure)– 5 weeks is ideal in cases where most of the park turf needs to be re-planted and established during spring closure. Less time for closure may be required if sections of park turf need to be replanted and smaller sections can be closed off with temporary fencing so that other parts of the park can remain open.
 - 1. Inform Community Program Coordinator 1 month in advance of scheduled closure
 - 2. Inform Park Board Member and Council Offices three weeks in advance of closure (Community Program Coordinator)

3. Inform community members, park friends' group(s), and users 2 weeks in advance via: on-site signage, website, social media, etc. (Community Program Coordinator working with Park and Recreation Marketing Team)
4. Aerate turf areas-mechanically, plugs to be vacuumed
5. Top dress turf areas with sand and/or organic compost
6. Apply organic agronomic program
7. Touch up the paint on fences, benches, picnic tables, trash receptacles
8. Tree pruning (winter)
9. Backfill low spots in turf R
10. Replace sod as needed -only during ideal times of early fall or spring and if park for up to six (6) weeks to allow roots to establish
11. Pressure wash hardscapes

19. RESTROOMS

White Rock Lake is classified as a Regional Park that was designed with several restrooms, several of which became inoperable over time due to capital maintenance issues. As units became inoperable, portable restrooms were installed to accommodate the high recreational demands of the park.

- a. Portable - units are featured at the following areas under current funding levels and serviced 3 times per week at minimum by a contractor. At least one unit per area shall be an ADA unit.
 - i. Big Thicket Building (2)
 - ii. Dallas United Crew Building (2)
 - iii. Bath House (2)
 - iv. Dreyfuss (1)
 - v. Sunset Bay (2)
 - vi. Mockingbird Bridge (2)
 - vii. Kayak Concessionaire (1)

- viii. T&P Hill (5)
 - ix. Parking lot at 3800 W. Lawther (2)
 - x. Parking lot at 4550 W. Lawther (2)
 - xi. Winstead Dam Parking Lot (4)
 - xii. Dog Park (2)
 - xiii. Winfrey Point Baseball Field (2)
- b. Permanent – cleaning services can be performed by janitorial contractor or park staff. Services include stocking supplies, disinfecting all fixtures, rinsing floors and walls, sweeping, and submitting maintenance work orders for plumbing, electrical, or mechanical issues.
- i. Sunset Bay (inoperable)
 - ii. Stone Tables (open; remodeled in 2021)
 - 1. When the Stone Tables restrooms were remodeled in 2021, staff began to unlock restrooms at Sunrise and lock restrooms at Sunset. A staffing plan for opening and closing restrooms is needed unless automatic locks are installed.
 - iii. T&P Hill (inoperable)
 - iv. Winfrey Point (inoperable)

20. HARDSCAPES

Hardscapes areas can be used for ornamental purposes such as in ornamental beds or purely practical purposes such as parking areas or expansion joints. These areas should be kept contained, orderly, free of weeds, and at adequate levels to serve intended purpose.

- a. Decomposed granite (DG) – keep free of weeds, level and packed. Line trimming or hand pulling of weeds is not practical in these areas and line trimming can be dangerous. Approved chemical control (see Appendix G) is ideal for these locations. It is important to match size and color of DG and stockpiling is recommended for replenishment.
- b. Expansion joints – are to be kept free of weeds by mechanical control and approved chemical control (see Appendix G).

- c. Flagstone paths – are to be kept trimmed and exposed by line trimming or other mechanical control. No “liquid edging”.
- d. Stonework - is inspected every other month for any defects, graffiti, or other items of concern.

21. BARRIERS AND DOME POSTS

Dome posts and barriers are used to prevent parking or driving onto unimproved surfaces around the park. To a limited extent, decorative boulders are also used in some locations.

- a. Annual assessments – Ideally performed during the last quarter of every fiscal year to prepare for bulk purchases at the beginning of the following fiscal year as well as develop winter work calendars for dome posts that require replacement.
- b. Replacement schedules – Replacement schedules should be based upon needs derived from annual assessment. Replacement should be scheduled as part of the winter work process.
- c. New installations – New installations (as opposed to replacements) should be approved through the Area Manager and once approved, utility lines should always be marked prior to installation.
 - i. Utility markings for new installations – 811 should be contacted to mark utility lines prior to installation. New installations must be approved by the Area Manager (replacements do not require approval).
- d. General maintenance
 - i. Wooden posts – should be assessed at least annually for replacement or repair. Look for splitting, chipping, decomposition, damage, or vandalism. Vegetation around (not between) posts can be controlled with a line trimmer or chemically with herbicide from approved chemical list (see Appendix G)
 - ii. Guard rail – should be assessed at least annually for damage or disrepair.

- iii. Slip posts – should be assessed at least annually to ensure all locking mechanisms are in place, posts are present, and to ensure receivers are not clogged or inhibited in any way.
- f. INTEGRATED PEST MANAGEMENT - All pesticide usage plans should follow established communication procedures (See SECTION 36).

22. PARKING AREA MAINTENANCE

- a. Gravel areas -
 - i. Product Standards – Flex base
 - ii. Aggregate installation -
 - 1. Equipment – bobcat, motor grader (maintainer), etc.
 - 2. Secure staged materials on-site with caution tape if left overnight
 - 3. Minimum 2-inch depth for material, filling in holes and leveling
 - iii. Curb stop installation – Curb stops should be used to designate parking spaces to maximize parking efficiency where lines cannot be painted.
- b. Asphalt and Concrete Areas – Inspect monthly for potholes, fading lines/stencils, leaning signage, failing sections, etc.
 - i. Repairs- schedule repairs as failures are encountered. This work will need to be outsourced to contractor (through Planning and Design Site Development Division or a work order will need to be submitted to the Facility Services Division).
 - ii. Striping- striping should ideally be scheduled and serviced every 3 years at minimum for parking spaces, lanes, crossing areas, ADA stencils, etc.
 - iii. Curb stop installation – curb stops should be used to designate parking spaces to maximize parking efficiency where there is no curb.

23. TRAIL SURFACES AND MAINTENANCE

The maintenance of the paved loop trail around White Rock Lake is essential to ensure user safety and optimal recreational experience. Trail areas can be affected by flooding/storms (see Section 24), damage or failure, undermining, debris, siltation, construction, etc. These impacts must be carefully managed and addressed in a timely manner.

- a. Inspections – Perform visual inspection of trails weekly to assess routine and major maintenance needs or immediately following a major storm or flood event. Submit work orders (OWOR system) to address maintenance needs. Safety concerns must be escalated to the Facilities Division Manager for immediate attention. Perform written inspection of trails at least monthly as part of the general park inspection process.
- b. Trail Surfaces -
 - i. Asphalt/Concrete – Monitor for undermining, failures/cracks, debris, silt, and obstructions. Address routine concerns immediately as part of routine, scheduled maintenance. Submit major damage concerns to Facility Services Division (OWOR system) for repair and render area safe as best as case allows for immediate, short-term remedy. Planning and Design Division as well as senior management should be included in correspondence of major/capital concerns.
 - ii. Decomposed granite (DG) – keep free of weeds, level and packed. Line trimming or hand pulling of weeds is not practical in these areas and line trimming can be dangerous. Approved chemical control (see Appendix G) is ideal for these locations if communication protocols are followed (see Section 36). It is important to match size and color of DG and stockpiling is recommended for replenishment.
- c. Trail Striping - Should remain visible and scheduled for restriping once lines reach 25% visibility. This should be evaluated annually during the general park inspection.
- d. Handrails – Monitor for aesthetics (painting) and structural/functional concerns. Address routine concerns immediately as part of routine, scheduled maintenance. Submit major damage concerns to Facility Services Division (OWOR system)

for repair and render area safe as best as case allows for immediate, short-term remedy. Planning and Design Division as well as senior management should be included in correspondence of major/capital concerns.

- e. Pedestrian bridges - Monitor for graffiti, undermining, failures/cracks, damaged or warped boards, debris, silt, and obstructions. Also, monitor footers and piers for structural concerns. Address routine concerns immediately as part of routine, scheduled maintenance. Submit major damage concerns to Park and Recreation Planning and Design Division engineers for an immediate needs assessment and render area safe as best as case allows for immediate, short-term remedy. Senior management should be included in correspondence of major/capital concerns. Board replacements should be placed on routine replacement schedules bridge by bridge.

- f. Trail closures – When it is required for trails to be closed for maintenance, it is important to communicate closure to patrons along with detour information as far in advance as possible. Communicate trail closures as follows (3 weeks in advance of closure unless closure is an emergency):
 - i. Send closure details including purpose, duration, map with specific locations and detour, safety plans, etc. to Community Program Coordinator.
 - ii. Community Program Coordinator to share closure info with Council Member, Park Board Member and Park Marketing Coordinator for feedback/distribution plan for general public.
 - iii. Once plan is approved, ensure proper closure safety measures are in place and details are strictly adhered to. If any deviation from approved plan is necessary, communicate all deviation needs to Community Program Coordinator to be communicated back to Council Member, Park Board Member and general public as soon as possible.

24. FLOOD MANAGEMENT PLAN

- a. Flood Event - If heavy rainfall results in outer bank flooding, the Supervisor II will inspect and assess the level of action needed to remove any debris on the shoreline after the Flood Event. If the debris present cannot be removed by Park's staff within a reasonable amount of time (2-3 days), then the Flood Action Plan will be utilized.
- b. Flood Action Plan (Appendix C)
- c. Flood Action Plan Implementation – if Flood Action Plan is warranted, the Supervisor II will notify District Manager and Area Manager of the need to implement the Flood Action Plan. If approved by District as well as Area Manager, the District Manager will request implementation approval from Assistant Director. Once approved by Assistant Director, the District Manager will send out the Flood Action Plan to all pertinent Districts within the plan to assist with their respective areas per the plan. An individual email will be sent to each assisting District Manager with their respective project area highlighted in the plan and stating that the implementation has been approved by the Assistant Director (Area Manager copied). Plan will be implemented and managed until completion according to timelines set forth in the plan.
- d. Mosquitos - An assigned Supervisor will inspect for any areas of standing water that may result in mosquito breeding and will direct the Chemical Applicator to treat these sites with mosquito dunks.

25. WETLAND AREAS

There are a number of wetlands that can be found throughout the park and adjoining park property. These wetlands are found near Dixon Branch, north of Mockingbird, and in the Fish Hatchery (see Wetland Map in Appendix H.IV). The wetlands are ecologically significant to the area, are carefully observed by various stakeholders, and carry various legal restrictions that must be considered when conducting large projects in these areas. Check with the Park and Recreation Planning and Design Division and Urban Biologist before conducting any major dirt work.

- a. Maintenance

- i. Forested wetlands (north of Mockingbird and Fish Hatchery) Monitor for dangerous trees in high use areas and remove as needed. Remove litter as needed, likely with volunteer efforts aiming for quarterly volunteer events. White Rock Lake Park wetlands have a very high level of bird nesting activity. Check with Urban Biologist before starting any vegetation removal. Monitor and remove invasive species as practical.
 - ii. Herbaceous wetlands (Dixon Branch and Stone Tables areas)- This area is highly visible to general public. During Spring and Fall bird migrations, this area features a high volume of bird activity. This area can be periodically mowed, but the timing must be carefully watched. It may end up being simply a matter of when the area dries up enough that mowing equipment can be used. Avoid mowing during the Spring nesting season (end of March through mid-May) and Fall migration (mid-September to mid-Oct). Optimum time for mowing is typically in December and January, if dry.
- b. Mosquitos
 - i. Mosquitos are part of a wetland ecosystem and are a food source for many small organisms throughout their life cycle. They can also be a major annoyance and cause potential public health issues. Note that the open water area of the lake is NOT associated with mosquito habitat. Much of the issues around the lake with mosquitos are related to container type litter. Continuous removal of container litter is needed. In areas around the wetlands that get significant utilization, applying BTI dunks to standing water areas at a rate of one dunk per 100 sq feet may be warranted. This may ultimately not be practical due to the size of the areas involved.
 - ii. During times of high mosquito activity, remind staff to dress appropriately and wear insect repellent.
 - iii. Working with the Code Compliance Service Mosquito Control Division as well the Park and Recreation Marketing and Communications Coordinator, use media platforms to raise public awareness during peak mosquito season (usually summer and mid-October).

26. LIGHTING

Lighting inspections are to be conducted annually *at minimum* by Park Maintenance District 1 staff and the facilities department to ensure that safety and vandalism are mitigated quickly as to minimize any possible outcome other than their sole purpose, to provide safety.

- a. Inspections and repairs - Conducted by District staff as assigned by District Manager. Visual inspections are to be conducted during dusk or dawn hours to ensure the timers or photocells are working properly. If these are not working properly notations must be made and communicated to the corresponding supervisor over that trade. If any light has been vandalized it will as well need to be notated and communicated accordingly. This will also require District Manager approval for the necessary materials for the repairs.

The assessment will need to be submitted to the Facility Services Division by the work order request process (email to PKR FAC SUPPORT to create an OWOR) so that the electrician manager can schedule repairs/replacements. Inspections should be conducted *annually at minimum*. This may require an overtime submission for staff to conduct assessments after hours when lights would normally be in operation. (For Replacements, see White Rock Lake Lighting and Design Guidelines (2009) (Appendix I).

27. GRAFFITI ABATEMENT

Graffiti removal should be scheduled and removed within 3 days of being identified or reported. Vulgar, highly offensive, or profane graffiti is to be escalated for immediate removal as high priority. Visual inspections for graffiti are conducted at playgrounds bi-weekly (twice per month) at minimum as part of playground inspections.

Approved methods for removal:

- a. Power washing – Ideal for solid-surface, large area removals. Use discretion to avoid painted surfaces and certain types of stone.

- b. Removal products – Ideal for deep stains on concrete or bare metal surfaces or fiberglass. Always reference product label prior to use.
- c. Painting over – Ideal for covering over graffiti on painted or stained surfaces. Ensure color match when employing this method.

Graffiti on park signage and other locations may require sign replacement as removal methods may exacerbate issue or strip sign of reflective properties or messaging. Similarly, graffiti removal methods on public art installation may require art restoration. All graffiti mitigation is to be approved by the Sr. Crew Leader or higher personnel.

Products used for graffiti removal on the Bath House must be approved by the Office of Historic Preservation since the Bath House is a registered landmark. Similar products and methods should be used on facilities with Historic significance (Appendix A) and must be approved by senior staff to ensure that there will be no damage to their historic character. Similar approval must be obtained for graffiti removal on public art.

28. SIGNAGE, MARQUEES, AND KIOSKS

There are several types of signage around White Rock Lake addressing needs for certain areas such as speed limits, trail markers, crossings, streets, traffic, parking, boat ramps, and signage identifying sections of the Lake.

- a. Type A Portal Signs - Large gateway markers used to provide a sense of entry or gateway along a major thoroughfare at a high visibility location on the park (e.g., Garland Rd. at E. Lawther). Type A portal signs may include a planter box.
- b. Type B Portal Signs – Used at entrances of specific sections of the lake to denote the name of the area (e.g. T & P Hill). These markers consist of a limestone monument sign with an inset stone panel and dimensional letters.
- c. Marquee Signs - There are 2 marquee signs located at the intersections of Winsted and Garland Rd, and E. Lake Highlands Dr. and Buckner Blvd. Marquees have lighted message boards for

posting information concerning events or general park-related messages. Messages posted in the marquees are managed by *For the Love of the Lake (FTLOTL)* via formal agreement and are approved by the Park Maintenance and Operations Division. Messages are typically to promote events, volunteer efforts, and safety concerns regarding White Rock Lake. Messages may not include language promoting a business or product for financial gain.

- d. Kiosks - There are 5 kiosk locations at White Rock Lake. They are located at Boy Scout Hill, T&P Hill, Bath House, WRL Dog Park, and 4774 W. Lawther. Kiosks are used by volunteer groups to post information regarding White Rock Lake and are under the same rules as messages posted on the marquee signs.
- e. Inspections - All signs, marquees and kiosks are inspected at least once per month during the general park quality control inspection.
- f. Maintenance and Repairs – Minor maintenance such as graffiti removal from signs, marquees, and kiosks is performed as encountered within 3 business days of reporting. Major repairs such as stone damage may require several weeks for repair due to work order submission/processing through the Facility Services Division, procurement of special material, and scheduling. Separate Process for Maintenance/not connected to signage section.
- g. Design Standards - Signage in the Park should conform to the White Rock Lake Park Signage Plan and the signage provisions of the White Rock Lake Park Design Guidelines (pages 66-72) (Appendix I).

29. ATHLETIC FIELD MAINTENANCE

All athletic fields at White Rock Lake Park are located at Winfrey Point on the east side of the Lake. There is 1 softball field and 2 baseball fields which are all available for game play reservation.

- a. Turf Maintenance Frequency - Mow/trim services will be conducted during the athletic field season of February 15 thru November 30. Generally, athletic field turf is dormant during the winter months

depending on when ground temperatures reach 55 degrees Fahrenheit. Ideally, the athletic field turf is mowed on 7-day cycles.

- b. Infield Routine Maintenance – Dragging or grooming of infields will be conducted on an as needed/reservation basis during the athletic season schedule. When multiple reservations have been made for the same field, the servicing will only be required prior to the first reservation of that day for that field. When in the off-season, the infield should be groomed monthly at a minimum to ensure that unwanted weeds do not abound or produce an undue maintenance burden. Lip removal should be done as needed to prevent bad hops.
- c. Annual Maintenance – Annual inspections are to be performed prior to the off-season so that necessary maintenance plans can be made including procurement timelines and execution schedules. Additional clay, conditioner, and bases may be needed to keep infield at minimum standard.
- d. Marking – Field marking services are to be conducted on an as needed/ reservation basis during scheduled business hours unless otherwise directed. When multiple reservations have been made for the same field, the servicing will only be required prior to the first reservation of that day for that field.
- e. Soil Health and Amendments – Annual testing of soil & top dressing may be necessary to ensure that the soil composition is one that is conducive to athletic field standards for that field type.
- f. Chemical applications – Semi-annual pre-emergent applications will be timed accordingly during spring/fall to minimize weed germination. Post emergent applications should be applied on an as needed basis in accordance with TDA Integrated Pest Management standards. Fertilization applications should be done at a minimum of 2 times per growing season unless soil tests or Integrated Pest Management standards state otherwise. Additional applications may be needed for various other problems such as fungus, nutsedge, pH, compaction, etc., but Integrated Pest Management principles still apply. Always follow communication

and notification protocols in Section 36 prior to scheduling pesticide applications.

- g. Turf standards - Turf quality will vary dependent on the type of sod that is present, operating budget, programming levels, and demands of the Turf Management Program (Appendix B) that is in place. At minimum, turf quality thresholds will be evaluated to include, but not limited to, measures such as: ratio of weeds to grass, color, density, and moisture content.
- h. Equipment – finish cut mowers (zero-turn or out-front mowers), production finish mowers, line trimmers, backpack blower, edger, etc.
- i. Turf Heights – 2 to 4 inches, seasonally determined by temperatures with higher heights being sought closer to winter and during higher temperatures.
- j. Irrigation standards – Irrigation is to be monitored during all normal maintenance functions, at least visually, on a weekly basis due to the nature in which the athletic fields are being utilized. Some considerations include but are not limited to safety (impact continuation), turf quality, chemical applications, monitoring dust on the infield, watering new sod, minimizing water waste, etc. Formal system inspections and corresponding repairs should occur no less than three (3) times per year to ensure that everything is in good working condition. Irrigation is also used to supplement rainfall and should be scheduled accordingly to ensure that best practices are being followed as good stewards of natural resources.
- k. Some sports associations enter into Beautification Agreements. Beautification Agreements are contracts with sports associations and park partners that establish additional maintenance services to enhance park maintenance functions.

30. BOAT RAMPS

- a. Inspections – perform visual inspection of boat ramps every other month to assess routine and major maintenance needs or

immediately following a major storm or flood event. Submit work orders to address maintenance needs. Safety concerns must be escalated to the Facilities Services Manager for immediate attention.

- b. Maintenance- monitor for undermining, failures/cracks, debris, silt, and obstructions. Address routine concerns immediately as part of a routine, scheduled maintenance. Submit major damage concerns to Facility Services Division for repair (OWOR system) and render area safe as best as case allows for immediate, short-term remedy. Planning and Design Division as well as senior management should be included in correspondence of major/capital concerns.

31. DOCKS AND PIERS (Public/ Private)

- a. Inspections – perform visual inspection of docks and piers every other month to assess routine and major maintenance needs or immediately following a major storm or flood event. Maintaining a high level of public safety is critically important. Submit work orders to address maintenance needs. Safety concerns must be escalated to the Facilities Services Manager for immediate attention.
- b. Private – To be maintained by owner/operator (typically under concessionaire/operator agreement in the nautical use zone.
- c. Public - Public Docks are open to the public and deemed first come first serve. The only time a permit will be required is for a special event on the docks to include weddings, private parties, etc. This must be specified and reserved accordingly.
 - i. Maintenance – Lighting, wood decking, joists, railing, and pilings should generally be maintained by issuing a work order request to Facility Services (OWOR system), however minor patch work in wood decking can be done by District staff. Asphalt approaches should be maintained for accessibility.
 - ii. Re-surfacing – Piers and docks should have decking replaced every 10-15 years based on condition and decking water sealed annually. Joists and other areas should be assessed and replaced as needed during re-surfacing work.

32. FACILITIES

- a. Service Center
- b. Reservation Buildings
 - i. Winfrey Point
 - ii. Big Thicket
 - iii. Bath House
- c. Pavilions and Shelters
- d. Boat houses
- e. Sunset Inn

33. ROADS AND DRIVES (Roads and Streets)

- a. Park Drives– Serve as connectors from public roads to parking areas or access points. Park drives are not part of the inventory of public roads managed by the City of Dallas Transportation Department or the Texas Department of Transportation. Additionally, park drives are surrounded by park land on both sides. Example: drive connecting White Rock Lake Service Center to E. Lawther.
 - i. Surfacing – monitor for obstructions and hazards such as potholes, erosion, or other failures. Remove all obstructions as priority, requesting overtime authorization from Area Manager if detected after business hours. Report all failures, damages, capital concerns, etc. to Park and Recreation Planning and Design Division for assessment.
 - ii. Signage – see Section 28 Signage, Marquees, and Kiosk.
 - iii. Park Road Striping - should remain visible and scheduled for restriping once lines reach 25% visibility. This should be evaluated annually during the general park inspection.
- b. Public Streets – public roads managed by City of Dallas Transportation Department or Texas Department of Transportation that are named and serve purposes of general, public

transportation or public access. Examples include but are not limited to W. Lawther Rd. and Tiffany Way.

- i. Surfacing - monitor for obstructions and hazards such as potholes, erosion, or other failures. Remove all obstructions as priority, requesting overtime authorization from Area Manager if detected after business hours. Report all failures, damages, capital concerns, etc. to Park and Recreation Planning and Design Division for assessment or collaboration with responsible department.
- ii. Signage – public road signage concerns or request must be submitted to responsible department for proper study/assessment scheduling by traffic engineers. Coordinate with Park and Recreation Planning and Design Division.

34. VOLUNTEER MANAGEMENT

Volunteer Management is the engagement, coordination, and administration to the systematic and logical process of working with and through volunteers, to achieve our objectives. These processes allow Individuals, families, and groups to discover their power to make a difference, through service. Our Community Stakeholders contribute countless hours of vested time and sweat equity into the betterment of our parks. These investments are also solidified through generous donations towards amenities and other park improvements. These partnerships, dependent on whether they are a beautification agreement or a conservation related project, will go to one of two individuals: CPC liaison or Urban Biologist.

- a. Partnerships
 - i. Short-Term (One-Time Volunteer Projects and Special Events).
 - ii. Long Term (Multi-Year Agreement for Maintenance or Development Management).
 - iii. Ongoing (One-Year beautification agreements with annual renewals).
 - iv. Beautification Partners
 - v. Capital/ Development Agreements
 - vi. Inter-Governmental Partners
 - vii. Concessionaire and Facilities Partners

- b. Donations
 - i. Grills
 - ii. Benches
 - iii. Picnic tables
 - iv. Drinking fountains
 - v. Exercise Equipment
 - vi. Trees
 - vii. Irrigation
 - viii. Plant Material
 - ix. Shade Structures
 - x. Playgrounds
 - xi. Signage
 - xii. Landscaping (see Approved Plant List in Appendix E)
 - xiii. Other Services & Projects

- c. Volunteer Beautification Efforts
 - i. Litter and Debris (Shoreline and Creek Clean Ups)
 - ii. Mulching
 - iii. Weeding
 - iv. Tree/ ornamental planting
 - v. Blackland Prairie restoration (see Appendix D)

35. UTILITY CONTACTS

The White Rock Lake utility contact list is to be used as a guide to assist any and all personnel with the infrastructure that surrounds the lake and any concerns or opportunities that may come up at any given time

Private Company Contacts

- a. Oncor – (888)313-4747

- b. Dallas Water Utilities – (214)651-1441

- c. Tx. Dig Test – 811

- d. Atmos – (888)286-6700

- e. AT&T – (800)288-2020
- f. Time Warner – (800)892-4357
- g. Dallas Arboretum – (214)515-6615

City of Dallas Contacts

- a. Plumbing – (214)670-9795
- b. Welders/Construction/CIP Projects – (214)670-8844
- c. Electrical/Painters – (214)670-8879

36. COMMUNICATION PLAN FOR SENSITIVE PROJECTS AND ENVIRONMENTAL INCIDENTS

White Rock Lake is the collection point for an approximately 100 square mile watershed area. As a result, there will be environmental incidents that will periodically occur at the lake, usually related to water quality. Some of the events will be naturally occurring color changes. Any environmental event is likely to garner public interest and media attention. Because of past concerns about use of pesticides and even tree removals, specific notification procedures are followed to alleviate concerns.

- a. Notifications- When an environmental incident is reported at White Rock Lake, or associated creeks, immediately contact the Area Manager. The Area Manager can facilitate who needs to be contacted such as (Dallas Water Utilities [DWU], Office of Environmental Quality, Texas Parks and Wildlife Department, Dallas Park and Recreation Department [PKR] environmental staff). Typically, most incidents will be handled by DWU Stormwater. The Area Manager or Assistant Director will pass along information to the Park Board representative, and City Council member.
- b. Media- The Assistant Director and Area Manager will determine if media will be handled through PKR, DWU or both. If through PKR, the Area Manager will work with the Park Urban Biologist and PKR communications staff to develop the communication plan specific

to the incident and determine who the point of contact will be. Media inquiries will be directed to that point of contact.

- c. Park Board Member- The District 9 Park Board Member should be notified prior to sensitive communications being released to the general public. The PBM will often pass along notifications to the general public especially through external stakeholders such as the *WRL Task Force* who will further disseminate information. This process allows the PBM to ensure pertinent information for their constituents is included in public messages.

- d. Pesticides: Prairies and Athletic Fields- For pesticide applications at prairie areas and athletic fields (Winfrey Pt.), a concerted effort will be made to inform the park board member 2 weeks in advance. The PBM will then notify major community groups such as the *WRL Task Force* for further dissemination of information. A map of the spray application area will be included in the email notification. Notification signage at athletic fields will be installed 2 days prior to applications and left in place 1 day following an application. Signs should include an adequate description of the target species and chemicals used. Should spray application dates veer from those communicated because of weather conditions or other reasons, email notification will be sent out to the Park Board Member for further dissemination.

- e. Pesticides: Hardscapes and spot treatments- For hardscape applications, the current practice is to treat the base of bollards, sign posts, furnishings, and parking lot wheelstops by way of spot-treatment around the entire lake once a month. Only areas with visible weeds get sprayed, however it is not possible to delineate exact spray locations with maps or signage. Staff will make a concerted effort to apply pesticides on hardscapes during a specific window, during the first week of every month so the public can be aware of this activity and applications are predictable. Should the spray application dates veer from those communicated because of weather conditions or other reasons, email notification will be sent out to the Park Board Member for further dissemination.

37. INTEGRATED PEST MANAGEMENT

The department follows an integrated pest management (IPM) program and actively pursues ways to reduce usage of synthetic/traditional chemicals through IPM and the City's CECAP program. White Rock Lake Park, in particular, has sensitive environmental areas and active public use which necessitates a judicious use of pesticides. For example, *Roundup* (a.i. glyphosate) has not been used anywhere at WRL Park since 2019 due to specific concerns about that product. The department increasingly uses alternative products with low toxicity out of concern for the public, the environment, and the applicator.

Organic-approved pesticides are increasingly used across the park system and it is a goal for the department to increase the use of these products every year and gradually reduce the use of synthetic pesticides. Maintenance personnel at WRL must follow the Department's IPM Program in addition to the above mentioned notification protocols that are unique maintenance work at White Rock Lake Park.

While IPM techniques such cultural and mechanical practices are incorporated to reduce the need to spray pesticides, non-chemical practices require greater labor resources and organic-approved products are significantly more expensive. Therefore, PMO is prevented from eliminating traditional pesticide usage entirely. Parks maintenance requires a delicate balancing of protecting the public and the environment from hazards, managing invasive damaging weeds, effectively using limited City resources, and keeping the park at a quality of appearance expected by park users and active recreation programs.

In order to further reduce use of pesticides and recognizing staff labor resources, there is opportunity to engage community groups to routinely hand-pull weeds and therefore eliminate the need for herbicides in certain areas. The Community Program Coordinator can assist with such an effort.

- a. IPM Techniques – Maintenance Managers should refer to the Department's IPM Plan for more detail. In general, IPM consists of a multi-faceted approach to managing pests that does not solely rely on pesticides. Pests at WRL Park that PMO deals with are predominately invasive weeds in a variety of settings, however the Urban Biologist and Urban Forester are often working on larger scale pest issues such as management of Emerald Ash Borer. The most effective IPM programs utilize scouting, monitoring, and

treatment thresholds. When pesticides are used, accurate and thorough record-keeping and follow-up visits to evaluate application efficacy are very important. Chemical applicators are licensed and regulated by the TDA. In general, IPM is divided into the following four control categories:

- i. Biological – For example, building Owl Boxes to control rodents, or planting Prairies to eliminate invasive weed populations and support beneficial insects and organisms.
- ii. Cultural – For example, calibrating irrigation systems to eliminate overspray and overwatering to reduce opportunities for weed growth, or fertilizing correctly, to avoid excess nitrogen-fueled growth that is prone to pest attack.
- iii. Physical/Mechanical – For example, mowing, hand pulling weeds, or applying mulch and weed fabric to smother weeds.
- iv. Chemical – For example, using pesticides and plant growth regulators to control weed growth.

38. APPENDICES

A. Historically significant structures –

Big Thicket

Bath House Cultural Center

White Rock Lake Stone Tables

Sunset Bay

Winfrey Point

White Rock Lake Dam

White Rock Pump Station

The Filter Building

White Rock Lake Boat House (Boomerang)

B. Turf Management Program

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Pre Emergent		Week 3 & 4	Week 1 & 2						Week 3 & 4	Week 1 & 2	Week 3 & 4	Week 1 & 2
Bermuda Release	All month											All month
Post Emergent			All Month									
Fertilization			Week 3 & 4	Week 1 & 2	Week 3 & 4		Week 1 & 2	Week 3 & 4	Week 1 & 2			
Grub Control			Optional Grub control									
Nutsedge Control			Spray as Needed									
Grassy Weeds			Spray as Needed									
Hard Scape		All Month										
Aeration			All month						All month			
Fire Ants	Treat as Needed											
Color Beds				Prepare beds for planting and maintain fertilization program								

C. Flood Action Plan

Park Maintenance District 1 Action Plan for Major Flood Events

Location:	Description of Work:	Equipment:	Manpower:	Time Delay:	Estimated Completion:	Labor Hours:	Assigned to:	Flood Boss:
White Rock Creek Trail: Phase 1	Clear Trail of Debris	1 - Front End Loader Small Equipment – Blower, Rakes, Shovels, Chain Saw	3-person crew: 1 – Equipment Operator 2 – Ground Operators	Day 1: Immediate	3 hours	9 Labor Hours	Amenities	Grounds Supervisor:
White Rock Creek Trail: Phase 2	Relocate debris into low areas. Should not have to haul off anything.	1 - Front End Loader Small Equipment – Blower, Rakes, Shovels, Chain Saw	3-person crew: 1 – Equipment Operator 2 – Ground Operators	3-5 days: When it has dried some.	8 hours	24 Labor Hours	Amenities	Grounds Supervisor:
White Rock Lake: All Hardscapes. Phase 1 –	Clear Trail/Street of Debris.	1 - Front End Loader 1 – Bobcat Small Equipment – Blower, Rakes, Shovels, Chain Saw	Two 3-person crews: 1 – Equipment Operator per crew 2 – Ground Operators per crew	Day 1: Immediate	8-16 hours	24-48 Labor Hours	Strike Team 4-5	WRL Supervisor:
White Rock Lake: Area 1-4 (West Side) Phase 2A	Remove Debris from Lake. Create piles. Haul off piles/trash to Dump.	1 - Front End Loader w/rake 1 – Bobcat 2 - Dump Trailer/Dump Truck Rakes, shovels, blowers, chain saw, litter tongs	8-person crew: 2 – Equipment Operators 4 – Driver/Spotter 2 – Ground Crew	3-5 days: When it has dried some.	40-80 hours	320-640 Labor Hours	District 3: 8 – Employees who meet job description.	WRL Supervisor:
White Rock Lake: Area 4-1 (West Side) Phase 2B	Remove Debris from Lake. Create piles. Haul off piles/trash to Dump.	1 - Front End Loader w/rake 1 – Toolcat 2 - Dump Trailer/Dump Truck Rakes, shovels, blowers, chain saw, litter tongs	8-person crew: 2 – Equipment Operators 4 – Driver/Spotter 2 – Ground Crew	3-5 days: When it has dried some.	40-80 hours	320-640 Labor Hours	Strike Team 5 Strike Team 3 1 – Athletics 1 - Playground	WRL Supervisor:
White Rock Lake: Area 6-11 (East Side) Phase 2C	Remove Debris from Lake. Create piles. Haul off piles/trash to Dump.	1 - Front End Loader w/rake 1 – Bobcat 2 - Dump Trailer/Dump Truck Rakes, shovels, blowers, chain saw, litter tongs	8-person crew: 2 – Equipment Operators 4 – Driver/Spotter 2 – Ground Crew	3-5 days: When it has dried some.	40-80 hours	320-640 Labor Hours	Strike Team 4 Amenities	WRL Supervisor:
White Rock Lake: Area 11-6 (East Side) Phase 2D	Remove Debris from Lake. Create piles. Haul off piles/ trash to Dump.	1 - Front End Loader w/rake 1 – Bobcat 2 - Dump Trailer/Dump Truck Rakes, shovels, blowers, chain saw, litter tongs	8-person crew: 2 – Equipment Operators 4 – Driver/Spotter 2 – Ground Crew	3-5 days: When it has dried some.	40-80 hours	320-640 Labor Hours	District 2: 8 – Employees who meet job description.	WRL Supervisor:
White Rock Lake: (Entire Lake) Phase 3	Haul off debris piles created in Phase 2A-D that are in excess of what can be removed by Crews.	1 – Bobcat 3 – Dump Trailers/Dump Trucks	Four 2-person crews 1 – Equipment Operator 1 – Spotter/Ground Crew 6 – Driver/Spotter	4-6 days: After piles have been made	40-80 hours	320-640 Labor Hours	Facility Services: 8 – Employees who meet job description.	WRL Supervisor:

D. Adopt-A-Prairie

ADOPT-A-PRAIRIE	VOLUNTEER ACTIVITIES	VOLUNTEER REQUIREMENTS
<p>Thank you for your interest in the Dallas Park and Recreation Department's Adopt-A-Prairie Program.</p> <p>This program gives volunteer groups the opportunity to engage in the restoration and maintenance of the precious prairie remnants found in Dallas parks.</p>	 <p>Manual removal of invasive species</p>  <p>Seed collection and/or planting</p>  <p>Collection of biological data</p>	<ol style="list-style-type: none"> 1. Sign up through a one year Beautification Agreement 2. Group has <i>at least</i> 5 participants per 1 acre selected 3. Commit to a minimum of 15 hours per month during the growing season (mid-March through October) 4. Commit to the three "Volunteer Activities" 5. Submit monthly paperwork and photos to the Urban Biologist
<p>CITY WILL PROVIDE</p> <ol style="list-style-type: none"> 1. Administration of the Beautification Agreement 2. Any needed training, paperwork, plant ID and survey methodology 3. Annual rotating mowing cycle 4. Disposal of pulled plant material 5. Annual update of volunteer group's prairie remnant condition 	<p>HOW TO SIGN UP</p> <ol style="list-style-type: none"> 1. Contact the Urban Biologist. <i>(see below for contact information)</i> 2. Identify area your group is interested in working on and work on getting a Beautification Agreement set up. 3. Anticipate that it will take 90 days for the agreement to get approved. 	  <p>HELP RESTORE DALLAS PARKS PRAIRIES</p>
	<p>Dallas Park and Recreation Department Turner Plaza 542 E. Jefferson Blvd Dallas, Texas 75203 214-670-1923 dallasparcs.org</p> <p>Urban Biologist UrbanBiologist@dallascityhall.com 214-671-1293 dallasparcs.org/476/Urban-Biologist</p>	

E. Approved Plant List

(List includes wildflower mixes and plants in the NCTx Flora Book)

Shrubs and Groundcovers

Glossy Abelia
Japanese Barberry
Elaeagnus
Hollies
Tam Juniper
Texas Sage
Wax Myrtle
Nandina
Fraser Photinia
Spiraea spp.
Cleyera
Purple Wintercreeper
Liriope
Monkeygrass
Asian Jasmine

Wildflowers

Alfalfa
Amer. Gerrymander
Amer. Basket Flower
Annual Aster
Annual Sunflower
Antelope's Horn
Arkansas Yucca
Arrowhead
Azure Sage
Barbara's Buttons
Bedstraw
Bergamont
Big Peppergrass
Black Eyed Susan
Bladder Pod
Blue Vine
Blue Eyed Grass
Blue Flax
Blue Celestial
Blue Funnel Lily
Bluebonnet

Broomweed
Buffalo Burr
Bull Nettle
Bunch Skullcap
Bur Clover
Buttercup
Button Snakeroot
Camphor Weed
Canada Onion
Canaigre
Carolina Buttercup
Carolina Petunia
Chickweed
Climbing Hemp
Coneflower
Creeping SDpot Flower
Crow Poison
Curleycup Gumweed
Dandelion
Day Primrose
Dog Tooth Violet
Drummond's Onion
Ducth Sweet Clover
Elderberry
Engelmann's Cutleaf Daisy
Eryngo
Evolvus nuttilliana
Fall Bitterweed
False Gaura
False Pennyroyal
Field Madder
Fleabane Daisy
Flowering Spurge
Four Nerved Daisy
Frostweed
Guara
Geum
Goats Beard
Golden Alexanders

Green Dragon	Paronychia
Green Milkweed	Pellitory
Green Thread	Pin Clover
Ground Plum	Pink Smartweed
Ground Cherry	Prairie Rose
Groundsel	Prairie Phlox
Heath Aster	Prairie Acacia
Hedge Parsley	Prairie Parsley
Henbit	Prairie Lace
Hibiscus	Prairie Larkspur
Horehound	Prairie Verbena
Illinois Bundlesflower	Puccoon
Indian Paintbrush	Rabbit's Chewing Tobacco
Indian Plantain	Ratanny
Iris Zigzag	Rose Palafloxia
Kansas Gayfeather	Rouge Plant
Kunhia	Sawtooth Daisy
Late Flowering Boneset	Scarlett Pea
Leather Flower	Seedbox
Lemon Beebalm	Sensitive Briar
Lindheimer's Texas Star	Sesbania
Lindheimer's Ironweed	Sheep Flowers
Linear Milkweed	Shepherd's Purse
Littleleaf Buttercup	Simpson's Rosin Weed
Loco Weed	Skullcap
Lotus	Slender Vervain
Love Vine	Snailseed
Lyreleaf Sage	Snake Herb
NMarble Flower	Snow on the Mountain
Matalea	Spiderwort
Maxmillian Sunflower	Square Bud Primrose
Mealy Blue Sage	Squaw Weed II
Mexican Hat	Standing Cypress
Milfiol	Star Violet
Missouri Primrose	Stemless Primrose
Missouri Wood Violet	Stinging Nettle
Mist Flower	Tall Goldenrod
Mock Bishop's Weed	Tall Whitlow Grass
Morning Glory Pink	Tansy Mustard
Morning Glory White	Ten Petaled Anemone
Mouse Ear Chickweed	Tx. Carpet Daisy
Native Dandelion	Tx. Bindweed
New Jersey Tea	Tx. Aster
Obedient Plant	Tx. Dandelion
Old Plainsman	Tx. Frog Fruit

Tx. Yellow Star Grass
 Tickseed
 Torolia arvensis
 Tourenfort Speedwell
 Trompillo
 Two-Lipped Flower
 Velvet Leaf Guara
 Venus's Looking Glass
 Veronica Persia
 Vetch
 Water-cress
 Water Primrose
 Water Willow
 Water Hemlock
 Western Iron Weed
 White Milkweed
 White Knotweed
 White Guara
 White Sweet Clover
 Whorled Milkweed
 Widow's Tears
 Wild Buckwheat
 Wild Alfalfa
 Wild Foxglove
 Wild Petunia
 Wild Hyacinth
 Wild Lettuce
 Wine Cup
 Wood's Corn Salad
 Yellow Flag Iris
 Yellow Puff
 Yellow Sweet Clover
 Yellow Passion Flower
 Yellow Flax

PRAIRIE GRASSES

Big Bluestem
 Buffalo Grass
 Bushy Bluestem

Common Witchgrass
 Eastern Gamagrass
 Foxtail
 Grease Grass
 Indian Grass
 Inland Sea Oats
 Little Bluestem
 Meadow Dropseed
 Sideoats Grama
 Switchgrass
 Tx. Grama
 Tx. Cupgrass
 Upland Switchgrass
 Windmill Grass
 Wright

TREES

American Elm-*ND*
 Ash Juniper-*ND*
 Bald Cypress-*N*
 Black Willow-*N*
 Burr Oak-*ND*
 Cedar Elm-*N*
 Chinkapin Oak-*ND*
 Cottonwood-*N*
 Deciduous Yaupon-*N*
 Green Ash-*ND*
 Live Oak-*N*
 Pecan-*ND*
 Redbud-*N*
 Red Cedar-*ND*
 Red Oak-*ND*
 Rough Leaf Dogwood-*N*
 Shumard Oak-*ND*
 Tx. Ash-*N*
 Tx. Redbud

N-Native to Texas
ND- Native to Dallas County

F. Invasive Species List

Queen Anne's Lace
 Johnson Grass

*Daucus carota**
*Sorghum halepense**

Chinese Tallow	<i>Triadica sebifera</i> *
Japanese Honeysuckle	<i>Lonicera japonica</i>
Quihoui Privet	<i>Ligustrum quihoui</i> *
Chinaberry	<i>Melia azedarach</i>
Sweet Scabious	<i>Sixalix atropurpurea</i> *
Lilac Chaste Tree	<i>Vitex agnus-castus</i>
Amur Honeysuckle	<i>Lonicera maackii</i>
Common Hedge Parsley	<i>Torilis arvensis</i>
Glossy Privet	<i>Ligustrum lucidum</i> *
Chinese Privet	<i>Ligustrum sinense</i> *
Musk Thistle	<i>Carduus nutans</i>
Taro	<i>Colocasia esculenta</i> *
Chinese Pistache	<i>Pistacia chinensis</i>
Alligatorweed	<i>Alternanthera philoxeroides</i>
Chinese Photinia	<i>Photinia serratifolia</i>
Annual Bastard Cabbage	<i>Rapistrum rugosum</i>
Heavenly Bamboo	<i>Nandina domestica</i> *
Persian Silk Tree	<i>Albizia julibrissin</i>
Rescue Brome	<i>Bromus catharticus</i>
Dallis Grass	<i>Paspalum dilatatum</i> *
Callery Pear	<i>Pyrus calleryana</i>
Paper Mulberry	<i>Broussonetia papyrifera</i>
Tree-of-Heaven	<i>Ailanthus altissima</i>
Giant Reed	<i>Arundo donax</i>
Knotted Hedgeparsley	<i>Torilis nodosa</i>
Thunberg's Brome	<i>Bromus japonicus</i>
Cheatgrass	<i>Bromus tectorum</i>
Chinese Wisteria	<i>Wisteria sinensis</i>

G. Approved Chemical List

i. Pre-Emergent

- Barricade – active ingredient (Prodiamine)
- Princep – active ingredient (Simazine)
- Snapshot – active ingredient (Isoxaben, Trifluralin)

ii. Post-Emergent

- Celsius – active ingredient (Dicamba)
- Trimec – active ingredient (24D)
- Plateau – active ingredient (Ammonium Salt of Imazapic)
- Image – active ingredient (Imazaquin)

Finale – active ingredient (Glufosinate-Ammonium) [Glyphosate Alternative](#)

Scythe – active ingredient (Pelargonic Acid) [Organic](#)

Vinegar – 20% concentration 80% water [Organic](#)

Tribute – active ingredient (Foramsulfuron, Halosulfuron-Methal & Thiencarbazone-Methal

Manuscript – active ingredient (Pinoxaden)

Ranger Pro – active ingredient (Glyphosate)

Certainty – active ingredient (Sulfosulfuron)

Triplet – active ingredient (24D)

Revolver – active ingredient (Foramsulfuron)

Fusilade II – active ingredient (Fluazifop-P-Butyl)

iii. Fertilizers

Harrell's – (28-3-10 50% Polyon w/ 8% Fe)

Harrell's – (15-5-10 50% Polyon w/ 5% Fe)

Harrell's – (18-10-10 80% Polyon w/ 5% Fe)

Harrell's – (0-0-5- 100% Polyon Micro)

iv. Insecticide

Conserve – active ingredient (Spinosab) [Organic](#)

Top Choice – active ingredient (Fipronil)

Pro-bait - active ingredient (Hydramethylnon)

Talstar – active ingredient (Bifenthrin)

Mesquito Dunks – active ingredient (Bacillus Thuringiensis)

Merit – active ingredient (Imidacloprid)

v. Fungicide

Azoxy 2SC – active ingredient (Azoxystrobin)

Heritage – active ingredient (Azoxystrobin)

vi. Additional Items

Acidiphy Liquid Irrigation Acidifier – active ingredient (Hydrochloric Acid) [Organic](#)

Kil Defoamer – active ingredient (Diedimethylpolysiloxane)

Blazer Spray Tank Cleaner – non-EPA regulated item

Surf-AC 820 Non-ionic Surfactant – active ingredient (Alcohol Ethoxylate)

OARS PS Surfacant – active ingredient (Hexahydroxy Polyoxyalkylene Polymers)

Primo – active ingredient (Trimexapac-ethal)

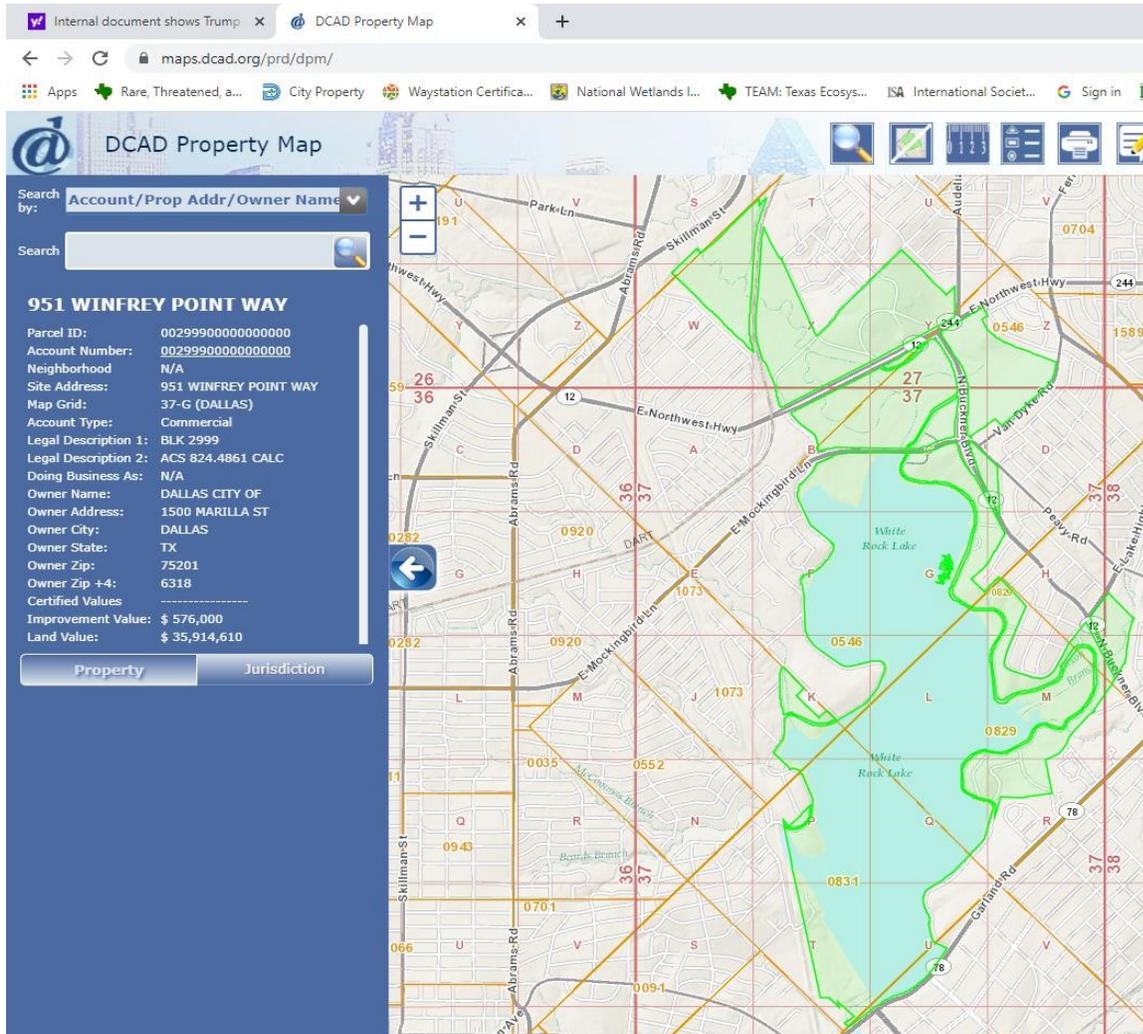
Prosedge – active ingredient (Halosulfuron-Methal)

X-Xtra Iron – (6-0-0) [Organic](#)

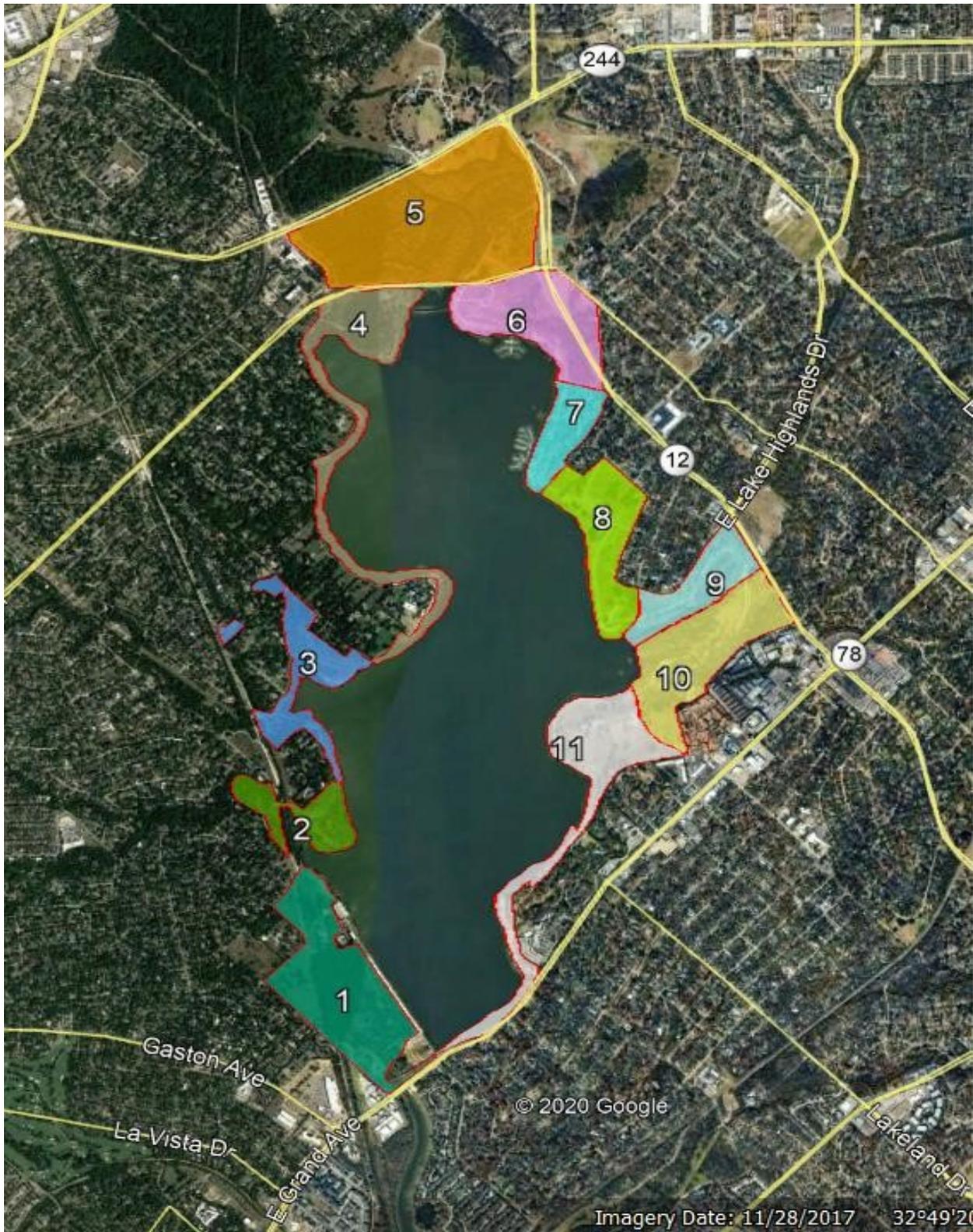
H. Maps

I. General Park Boundaries

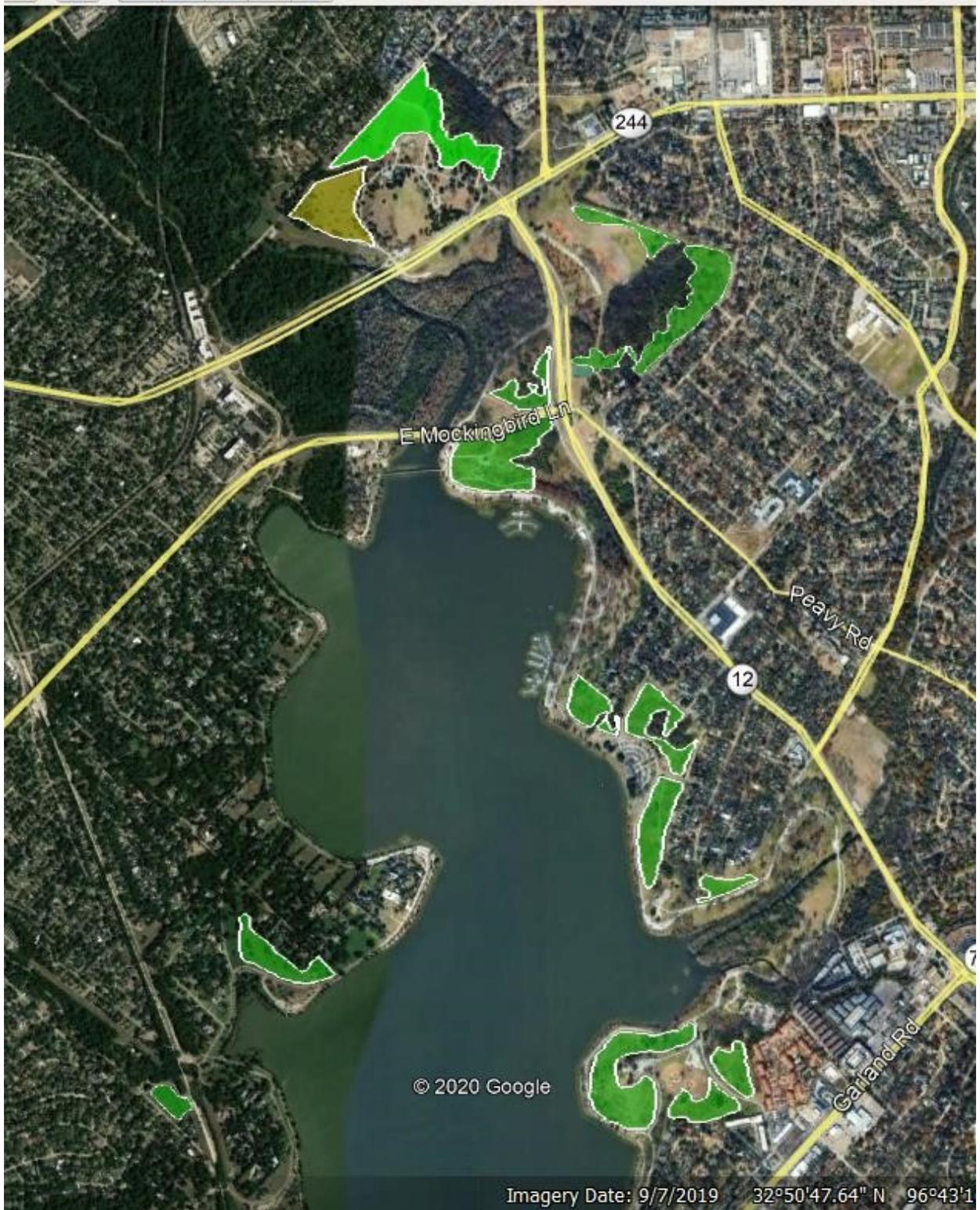
Note: Northernmost boundary of White Rock Lake Park is E. Mockingbird Ln. however above map includes Norbuck, Flagpole Hill, WRL Dog, & Olive Shapiro Parks to reflect the WRL Greenbelt system.



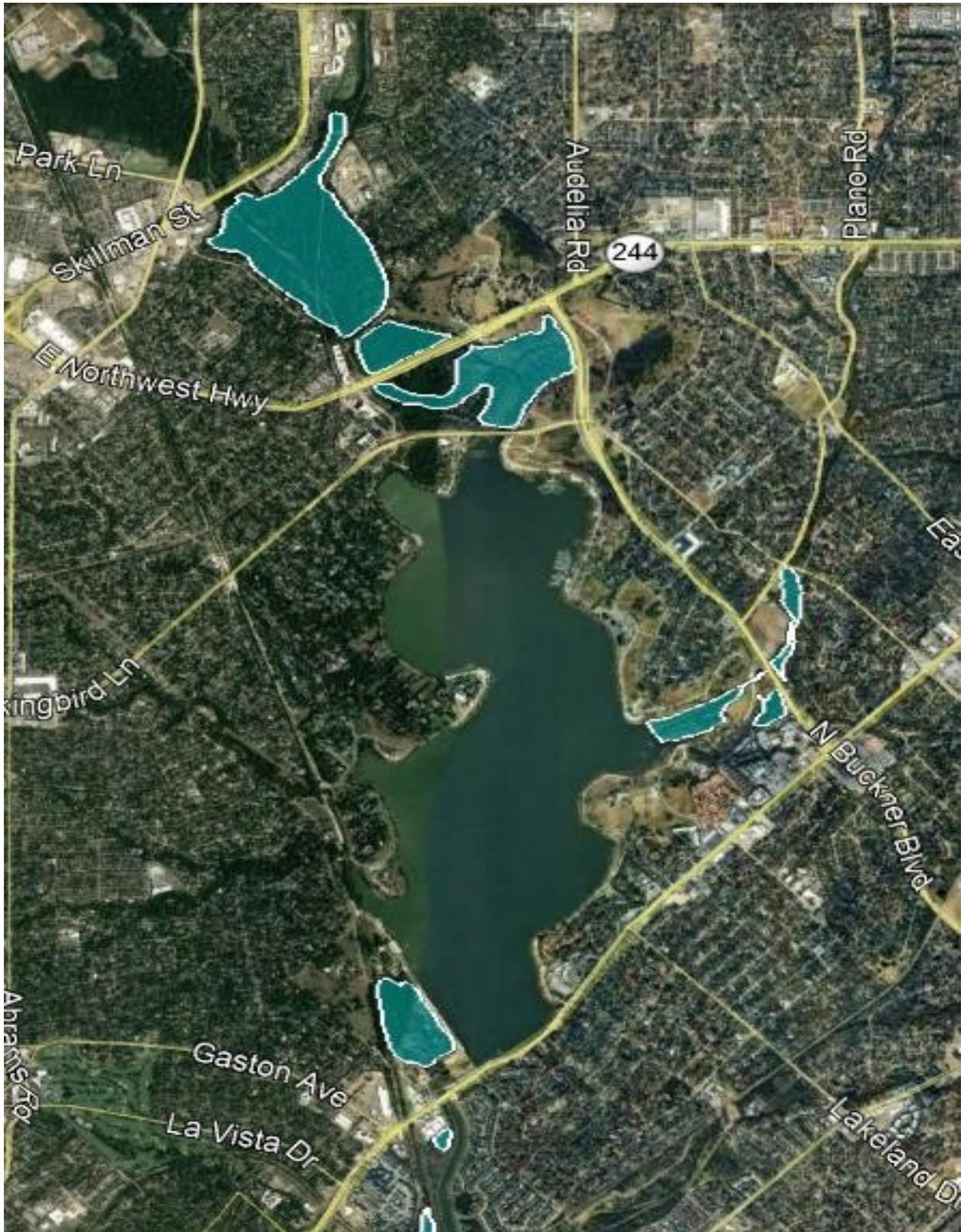
II. Maintenance Zones



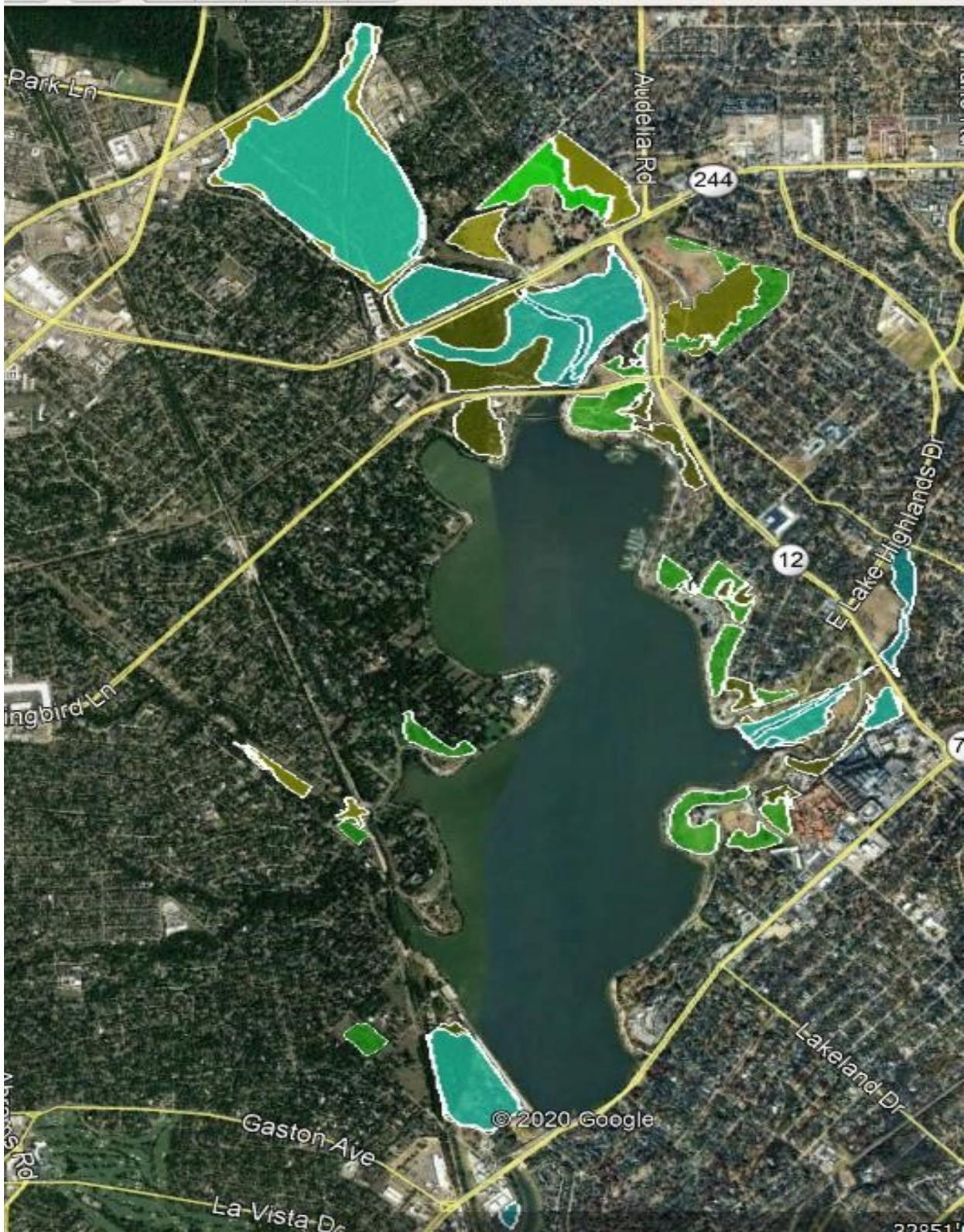
III. Prairie Areas



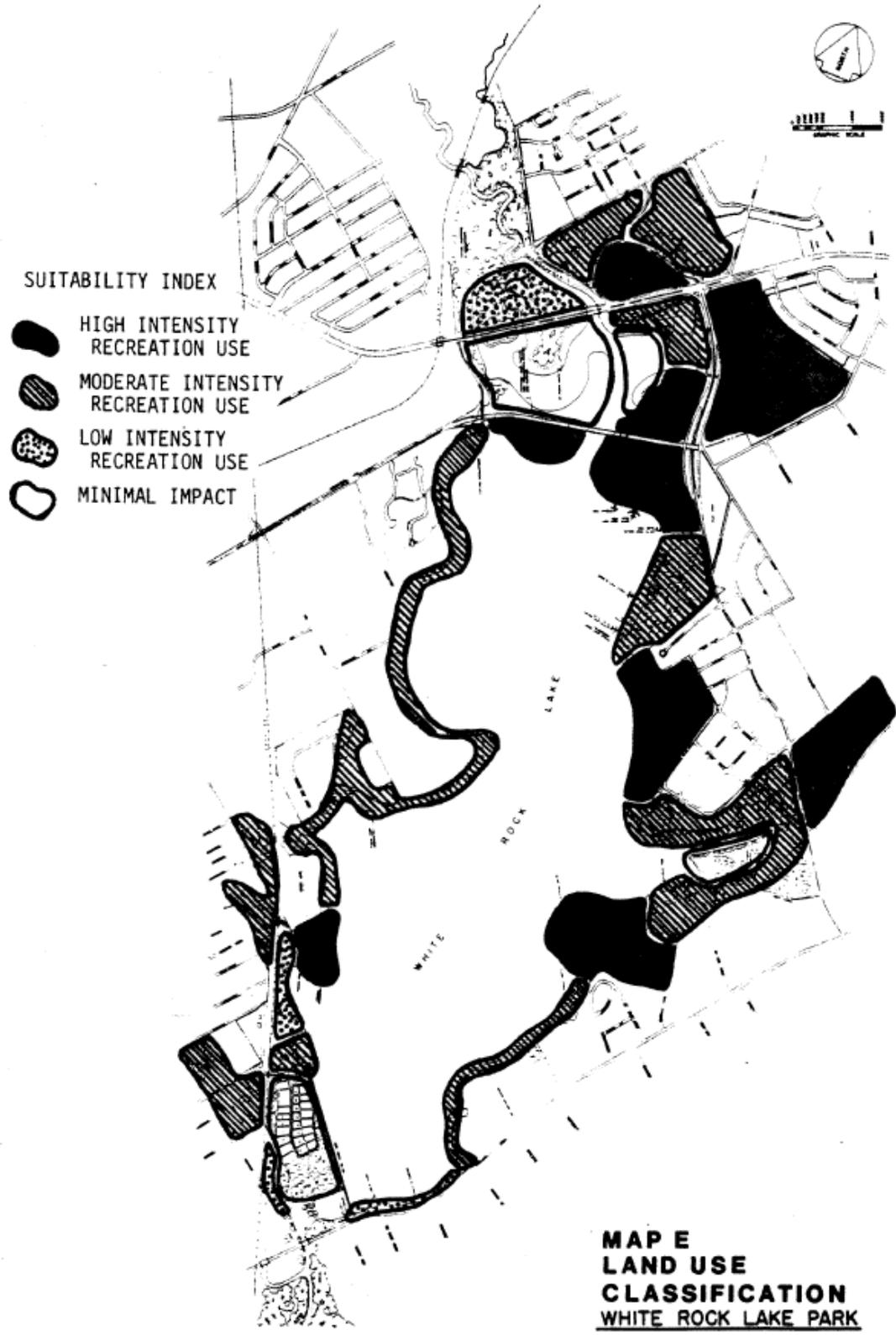
IV. Wetlands



V. All Environmentally Sensitive Areas (Prairies, Wetlands, Forests)

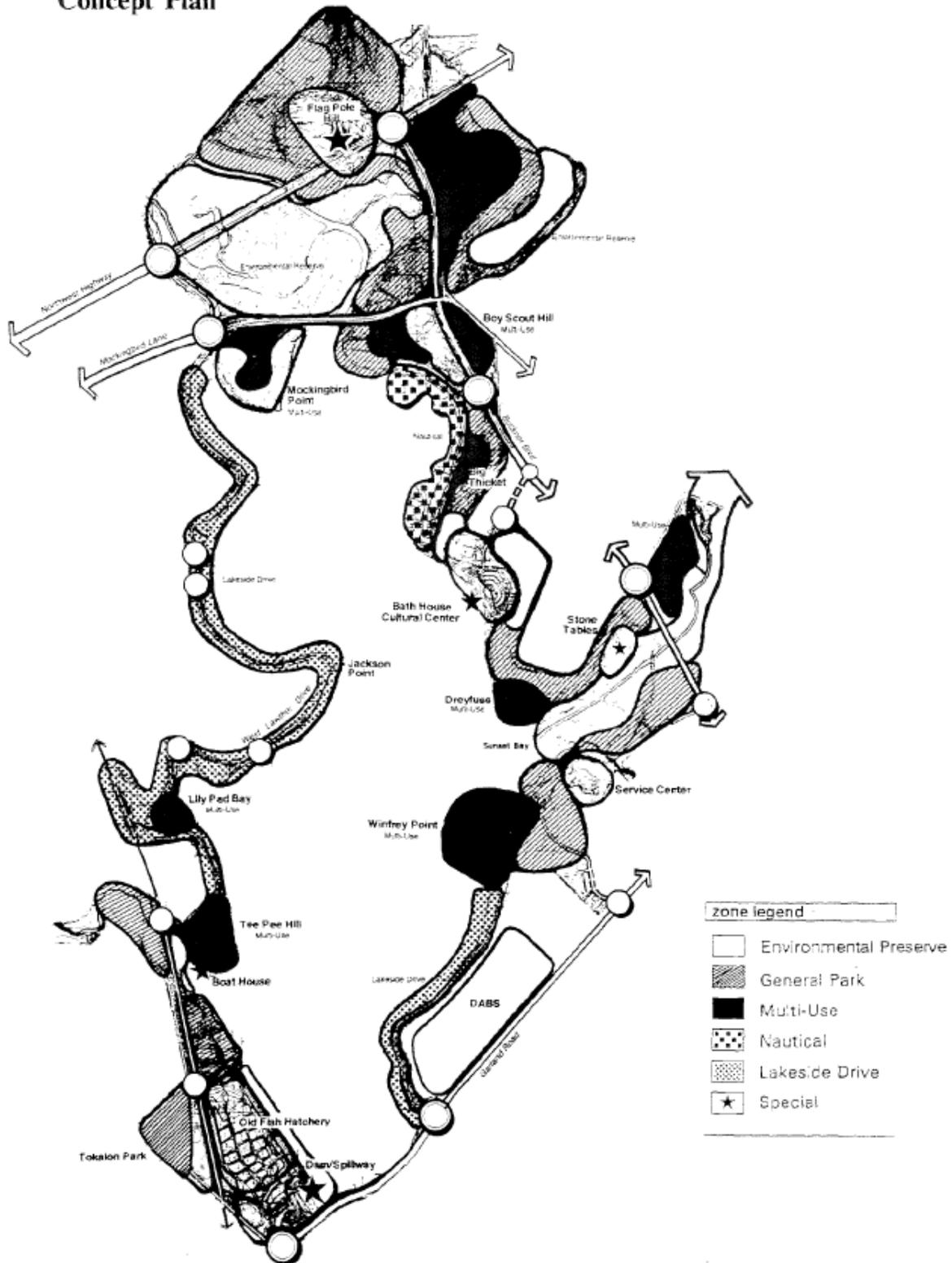


VI. Use Classifications and Vegetation Types
i. Land Use Classification (1987 Mgmt Plan)



ii. Diversified Concept Plan (1994 Design Guide)

Exhibit 1
Concept Plan



iii. Vegetation Types (1994 Design Guide)

Views

(See exhibit 9.) One of the biggest amenities of White Rock Lake Park is its grand lake views. Picnickers, trail users, and adjacent residents enjoy the beauty and open space the lake creates. Preserving the existing view corridors should be a high priority in all design projects and planning efforts. Buffering or screening undesirable park features enhances the aesthetic appeal of the park, however, care should be taken when placing or locating such undesirable features so that the resulting buffers do not block residential lake views. When space limitations or other factors do not allow for location options, it is important that the adjacent property owners be notified of the project and allowed to discuss options and understand the design restrictions. A lake view is often the prime reason for residing on lakeshore or lakeview property.

Vegetation

General Objectives

The *Management Plan for White Rock Lake Park* adopted in 1987 contains the following objective related to the management of its vegetative resources:

"Native and indigenous vegetation will be maintained and restored whenever possible to provide a stable groundcover and canopy to enhance the park as a unique urban resource. Wildflower and native grass areas will be preserved against encroachment and uses which endanger their existence. An extensive reforestation program will be instituted to replace deteriorating trees and to

ensure the existence of mature tree cover in the future."

Using this management objective as a benchmark philosophy, and understanding that the principal vegetation in the park is composed of turf areas, native grass areas, and tree cover, the following *general design objectives* are recommended to guide vegetative development and redevelopment:

- Shoreline Reforestation and Enhancement should continue in accordance with the plan developed and approved in 1991. This area is defined as those portions of the park between the lake shoreline and East and West Lawther Drives.
- To more easily guide future redevelopment and maintenance those areas outside the shoreline enhancement zone should be grouped as follows:

Type I areas: Areas of the park regularly mowed and maintained.

Type II areas: Areas of the park mowed and maintained less frequently.

Type III areas: Areas of the park reserved for wildflowers.

Type IV areas: Areas of the park reserved for prairie grasses.

Type V areas: Areas designated as *environmental preserve*.

See Exhibit 10 and figure 46 for delineation of the above described areas.

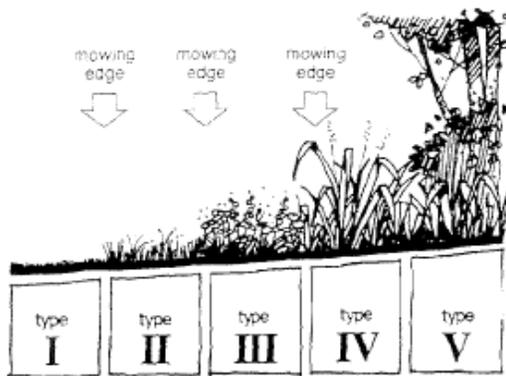


Figure 46. Vegetation zones.

Criteria and Guidelines

The following *criteria and guidelines* were created to guide the vegetative redevelopment efforts. Five plant lists have been developed that respond to the characteristics of each of the five areas listed above. Refer to the Appendix for specific plant material recommendations.

Type I areas:

- When redevelopment or reforestation occurs in these areas, plant materials should be selected from **Plant List 1** in Appendix B.
- Use of shrubs, groundcover, and seasonal color shall be limited to specific portals identified by these guidelines, public rental facilities (i.e. Winfrey Point, etc), or special facilities (Bath House Cultural Center) where such use would be viewed in the appropriate context.
- Maintenance procedures such as trimming, edging, mowing, etc. should be sensitive to the visual importance of the overall vegetative appearance of the park.

- Reforestation should respect view corridors established in Exhibit 8.

Type II areas:

- When redevelopment or reforestation occurs in these areas, plant materials should be selected from **Plant List 2** from the Appendix and shall be confined to turf grasses, native ornamental trees, and shade trees. Use of masses of ornamental shrubs, groundcover, and seasonal color is inappropriate for these areas.

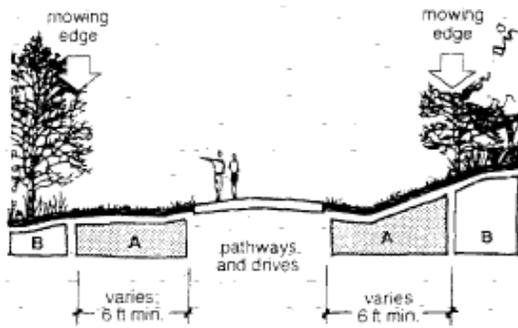
- Reforestation should respect view corridors established in Exhibit 8.

Type III areas:

- Utilize wildflowers from **Plant List 3** found in Appendix B.
- Reforestation should be confined to "fringe" areas to maximize the area devoted to wildflowers. Trees utilized for reforestation should be selected from **Plant List 2** in the Appendix.

Type IV areas:

- Utilize prairie grasses from **Plant List 4** found in the Appendix.
- Reforestation should be confined to "fringe" areas to maximize the area devoted to prairie grass. Trees utilized for reforestation should be selected from **Plant List 2** in the Appendix.
- See **Prairies** (Appendix C) for prairie definition and maintenance.



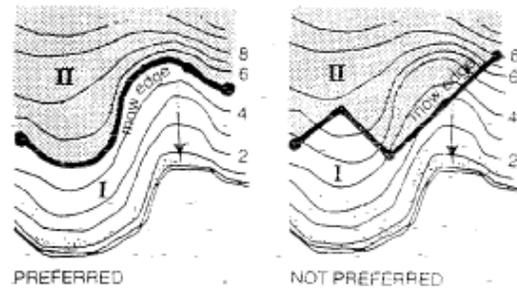
- ☉ Generally, all park pathways and drives should have maintained turf areas A adjacent to circulation paths to facilitate improved maintenance and trash pick-up. Exceptions to this guideline include pathways located in certain areas of the environmental reserve and special zones.

Figure 47. Pathway zones.

Type V areas:

- Development/redevelopment in these areas should occur only to restore and enhance shallow water wetland plant communities and to provide appropriate habitat zones for fish and wildlife.
- Provide for appropriate *diversification* of native plants. Refer to **Plant List 5** for plant material to be utilized in these areas. This diversity should be reflected in plant sizes, shapes, and ages in addition to variety of plant species.

Zone edge delineation. Most zones will be delineated by a mowing edge. Mowing edges should follow the contours of the land when possible (see figure 47). Type I areas should be used adjacent to all drives and pathways except in environmental and special zones (see figure 48).



- ☉ Generally, mowing edge should follow the contours of the land.

Figure 48. Mowing edges.

Lighting

In order to enhance the Park's natural features and character and maximize park security and safety, lighting should be carefully planned so that it appears to take a very minor role in the Park environment. The following are all lighting objectives that are important to maintain and support the natural character of the park:

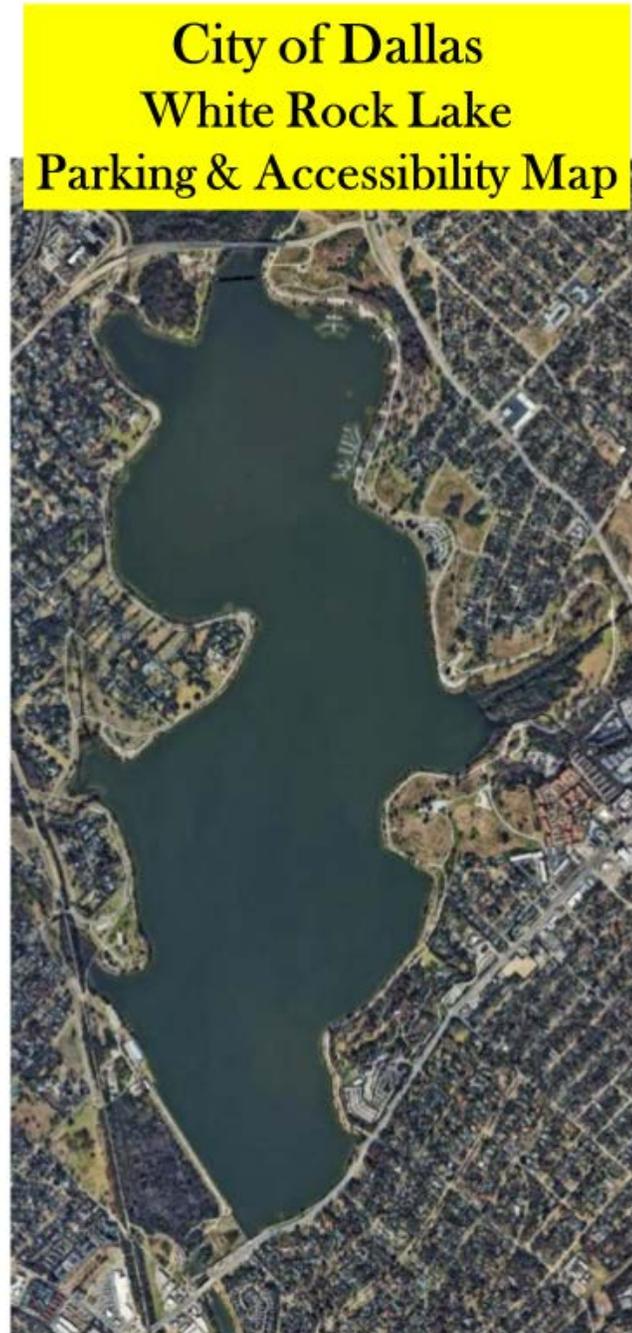
- Locate major electrical supply lines facilities and lighting underground,
- Minimize fixture use,
- medium and low lighting levels,
- long lamp life and energy efficient fixtures,
- and concealed lighting sources.

The lighting use and intensity is slightly different in each Park Zone. The Design Guidelines recommend only one (1) fixture that promotes a use-district character and that is the Nautical Zone light fixture. This light with cross-arm is recommended for use only in the Nautical Zone and at the T-shaped fishing piers around the lake (see figure 42). The three (3) lighting fixtures recommended are as follows:

VII. Parking Areas

A map of White Rock Lake Region parking areas can be found here:

<https://earth.google.com/web/@32.83972884,-96.72038774,139.45071376a,10388.74412549d,30.00000002y,359.99999991h,ot,or/data=MicKJQojCiExZHBIMTM2NIBoRURxeThqSEZudlAtTmhMTERXTUJhY1g>



City of Dallas White Rock Lake Parking & Accessibility Map Area 2



VIII. Recreation & Amenities

i. Use Zones and Existing Conditions (2009 Lighting Guide)

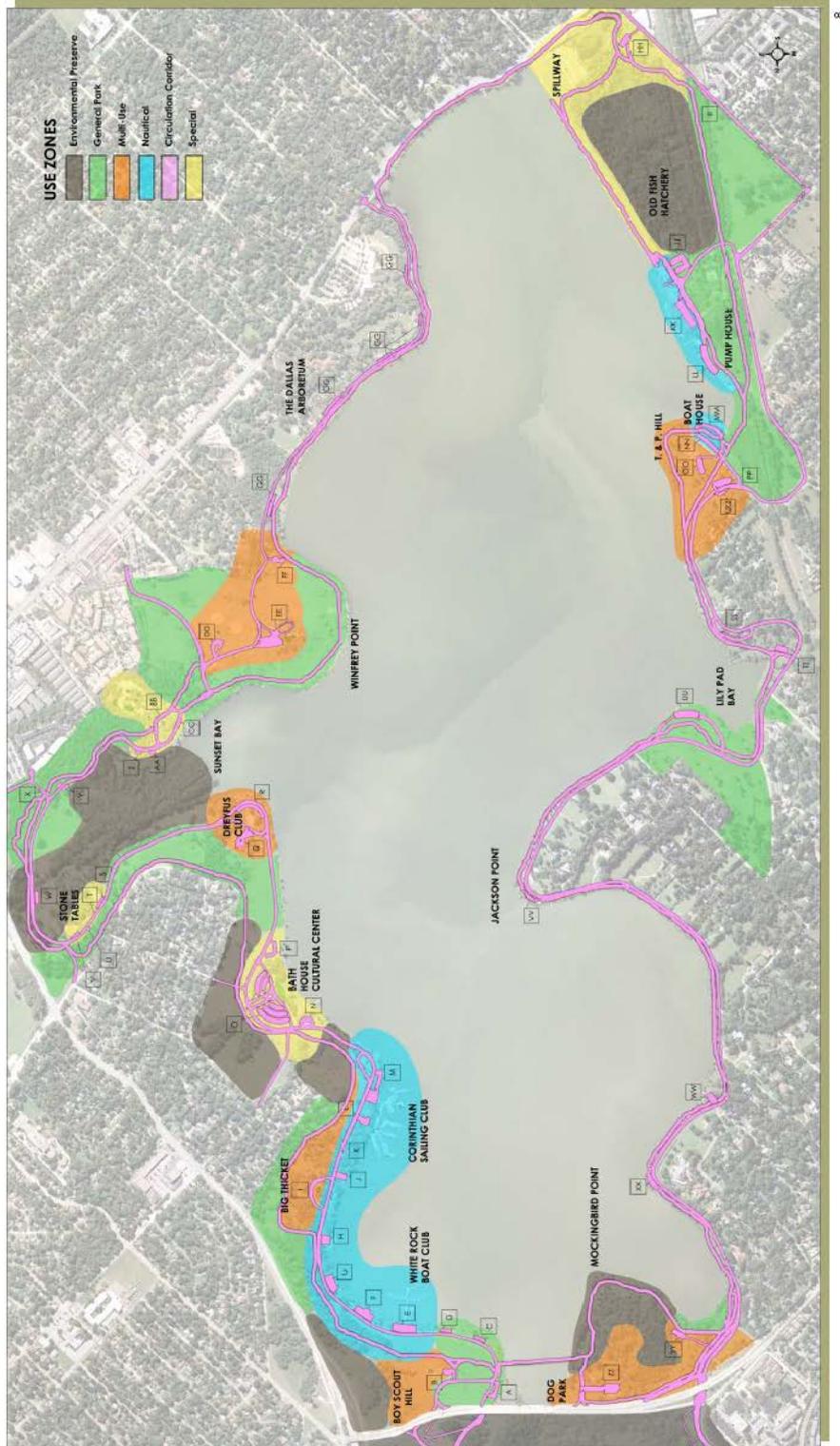
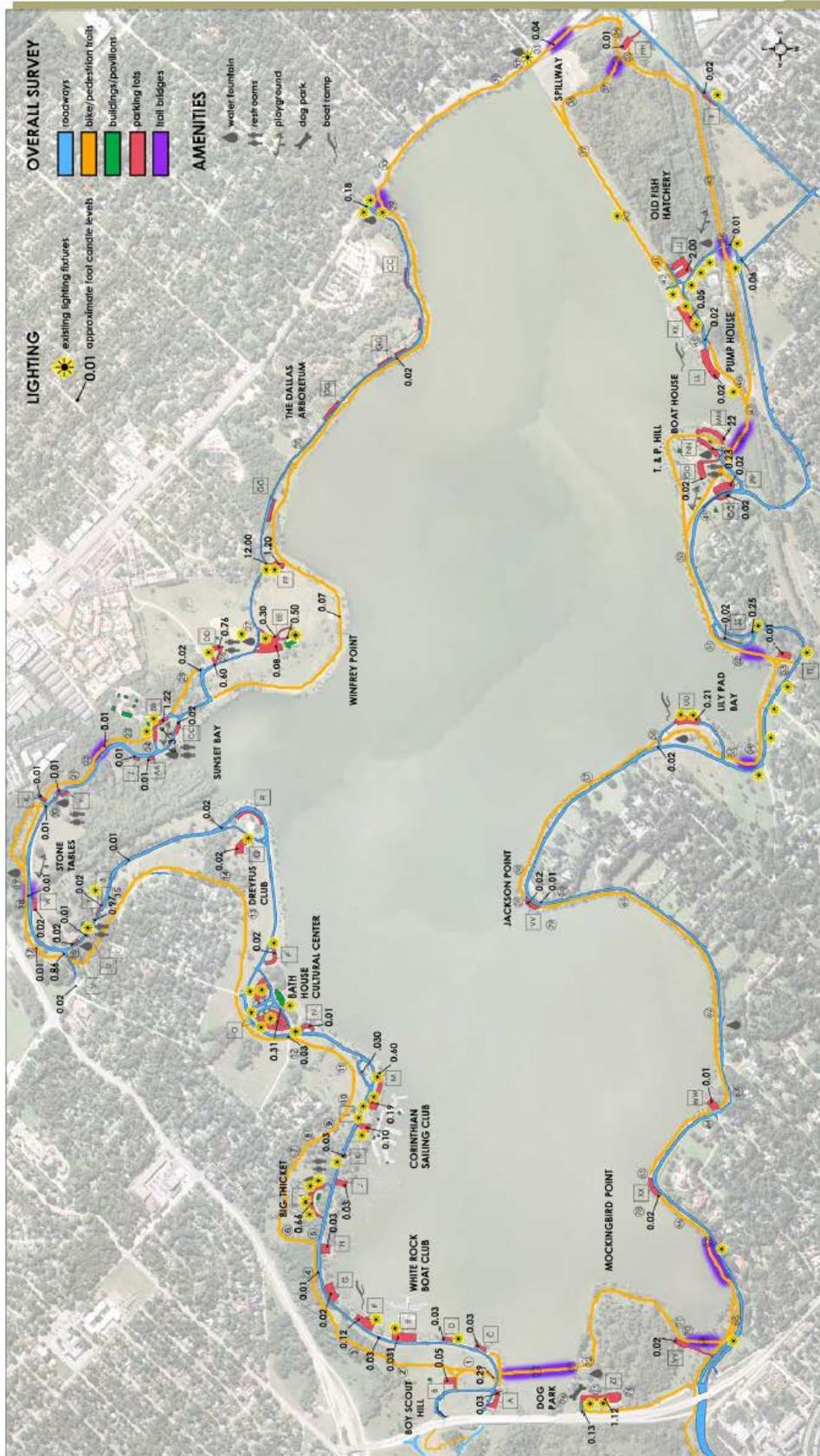


Figure 2 - Map of Use Zones



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Figure 3 - Existing Conditions Map
Reference page 12 for selected photos - remaining photos in Appendix.

I. Additional Resources

- I. Management Plan for White Rock Lake Park (1987)
- II. Master Plan for Implementation of the 1987 Management Plan For White Rock Lake Park (1990)
- III. White Rock Lake Shoreline Tree Enhancement Plan (1991)
- IV. White Rock Lake Park Design Guidelines (1994)
- V. [Renaissance Plan for Dallas Parks & Recreation \(2002\)](#)

<http://tx-dallasparcs.civicplus.com/DocumentCenter/Home/View/329>

- VI. [White Rock Lake Park Lighting Master Plan & Design Guidelines \(2009\)](#)

<http://tx-dallasparcs.civicplus.com/DocumentCenter/Home/View/328>