

CRESCENT BEND NATURE PARK STANDARD OPERATING PROCEDURE DRAFT (12/11/14)

Crescent Bend Nature Park is unique among public parks, both in purpose and features. As a nature park, it is home to plants and animals of all sizes and types, from the smallest algae, grass or forb, to the largest of trees, from the smallest invertebrate to the largest mammal, and from the smallest crustacean to the largest fish common to the region. We, the people, are merely guests in their home. It is our job to maintain their home (habitat) in such a way as to be as compatible as practical with their needs.

Crescent Bend Nature Park is composed of three general types of overlapping habitat or ecological regions, the grassy savanna, the riparian zone, and the upland woodlands. The maintenance needs of each habitat type are different from one another, thereby requiring different procedures in order to provide a safe, stable and healthy environment for a diversity of wildlife.

ANNUAL SURVEY AND REVIEW

In March of each year, a survey and review of the Park's "health" will be performed by park management. A consultation with outside experts may be used, as needed, to determine the quality and quantity of natural resources and the "best method" maintenance for the coming year. The adopted plans will be effective April 1st of the present year and continue through March of the following year. With final approval of the Park Manager, the adopted plans are subject to change due to acts of nature, budget and manpower limitations, or other unforeseen events occurring during the year. The annual review will include:

- Mowing Plan for one year
- Vegetation Management Plan for one year
- Identify new and continuing projects to assure the Park's improvement
- Establish priorities for activities and programs in the Park

DAILY DUTIES

A park employee will conduct the following duties daily:

- Open the main gate at the designated time for park opening to public
- Clean restrooms and water fountains and ensure proper operation
- Empty trash containers as needed at restrooms, parking lots, and picnic areas
- Pick up litter as needed in public use areas
- Drive park from entrance to northern road barrier for visual inspection of park
- Report needed safety maintenance if unable to resolve during visit
- Inspect barriers and post and cable for security and safety
- Secure main gate at the designated time in the evening

WEEKLY DUTIES

A park employee will conduct the following duties once a week:

- Drive each park road for visual inspection of park
- Empty trash containers as needed along hiking trail
- Report needed safety maintenance if unable to resolve during visit
- Report mowing needs for scheduling

MONTHLY DUTIES

A park employee will conduct the following duties once a month:

- Drive each park road and hiking trail for visual inspection of park
- Conduct safety and maintenance inspections

SAFETY AND MAINTENANCE INSPECTIONS

Safety and maintenance inspections will be conducted monthly by a park employee. Report needed maintenance to Park Supervisor and Park Manager for scheduling. Each of the following will be included in inspection:

- Restroom toilets, sinks, lighting, septic
- Water fountains
- Picnic tables and trash containers
- Hiking trail and seating
- Park signage, including QR placards, for condition
- Post and cable and road barriers
- Road conditions for hazards

MOWING AND TRIMMING MAINTENANCE

Most of the Park's 175 acres will not be mowed. Scheduling will be dependent on weather conditions, vegetation growth, and season. Areas designated for public use will be visually inspected weekly to determine scheduling. In general, mowing in public use areas should be initiated when vegetation growth reaches 30% coverage at eight inches tall. Mowing may be initiated to reduce fire danger and improve safe use by the public.

Equipment used for mowing and trimming will be inspected and cleaned prior to entry in the park. This equipment will be inspected and cleaned after use prior to leaving the park to prevent cross-contamination of plant species.

An Annual Mowing Plan will be adopted each year to define designated areas and mowing operations. Appendix A defines the general guidelines for this plan.

HIKING TRAIL MAINTENANCE

The granite hiking trail (1.3 miles) will be inspected monthly for needed maintenance, safety hazards, debris removal, and replacement of lost gravel. The trail will be treated with approved herbicides to control vegetation as needed.

ROAD AND BARRIER MAINTENANCE

The vehicle barriers (gates) for entry to non-public vehicle roads will remain secured and locked at all times. Gate codes are restricted and access given to authorize personnel only. Gate codes will be changed periodically as needed for security. Fire, Police, Public Works, and EMS departments will be notified when gate codes are changed.

Public vehicle access roads and parking areas will be inspected and maintained to provide public safety. Road surfaces will be repaired as needed.

Non-public vehicle roads will be maintained to allow public use for additional hiking/bicycling trails and access for maintenance and emergency situations. Road surfaces will be cleared of vegetation and debris as needed. The non-public vehicle roads may be treated with approved herbicides to control vegetation as needed.

VEGETATION MANAGEMENT

The Park's ecological regions are dependent upon water and the plant life that exist in each zone. An annual review will be conducted to determine the best methods for management of the park's plant life. Appendix B defines the general guidelines for developing plans and projects needed to maintain a diverse, balanced environment.

PRUNING FOR SAFETY

The pruning of trees and other plants will only be done for safety reasons to stay within the parameters of the Guadalupe and Bexar County Extension Services recommendations. Pruning will only be done along roads, access barriers, parking areas, picnic tables, and hiking trail as needed for safety and to aid in mowing operations.

ANIMAL MANAGEMENT

The first point of contact will be Schertz Animal Control to assess situations in the park involving animal management. Other appropriate agencies may be contacted as needed. During routine inspections, a park employee will report any suspicious activities which may include:

- Abandoned pets
- Undesirable animal species such as feral hogs
- Dead animals in public use areas
- Animals exhibiting suspicious behavior indicating injury or disease
- Animals in public use areas which may endanger public

LITTER AND WASTE CONTROL

A park employee will report any illegal dumping of trash or debris found during routine inspections to the Park Supervisor and Park Manager. Scheduling will be arranged for proper cleanup and disposal. If an evaluation of waste is determined to contain hazardous materials, the appropriate agency will be contacted for proper cleanup and disposal.

CHEMICAL APPLICATIONS

Pesticides used for disease and insect control will be provided by a licensed person only. Fertilizers are normally not necessary and not used. Only approved herbicides will be used to control vegetation along hiking trail and on roadways.

1. Preparation
 - a. Make sure Chemical Handling Certification is complete and up-to-date before handling any chemicals.
 - b. Calibrate application equipment to avoid excessive application.
 - c. Time and apply the application of chemicals to coincide with the manufacturer's recommendation for best results ("Read the Label").
 - d. Know the weather conditions. Apply only when wind speeds are low (less than 5 mph).
2. Process
 - a. Always follow the manufacturer's recommendations for mixing, application and disposal. ("Read the Label").
 - b. Mix inside a protected area with impervious secondary containment (preferably indoors) so that spills or leaks are kept to a minimum.
 - c. Employ techniques to minimize off-target application.
3. Clean-up
 - a. Triple rinse containers, and use rinse water as product. Dispose of unused amounts as hazardous waste.
 - b. Always follow all federal and state regulations governing use, storage and disposal of chemicals and their containers. ("Read the Label")
4. Documentation
 - a. Keep copies of MSD sheets for all products used.
 - b. Record application activities, including date, individual who did the application, amount of product used and approximate area covered.

CIBOLO CREEK

The management of the Park does not include management of the adjacent Cibolo Creek. The principal protector of the Creek is the San Antonio River Authority (SARA). Any improvements and/or changes made to Cibolo Creek on behalf of the Park will need to be sanctioned by SARA.

SCHEDULED EVENTS AND LARGE GROUPS USAGE OF PARK

The Parks Department will grant and approve all scheduled events held within the park. The “group” conducting the event will provide contact information for the person or persons responsible for the group’s conduct. Full disclosure of all activity plans will be provided by the “group” prior to approval. The responsible group parties will be informed about what is permissible and what is improper activities during their usage of the park.

A park employee will provide the service of opening gates and barriers as needed for the event. If the non-public road barriers need to remain open during the event, the responsible group parties will provide a person or persons to monitor open barriers. The responsible group parties are responsible for securing the barriers at the end of the event.

APPENDIX A ANNUAL MOWING PLAN

Mowing is an essential operation needed to provide a safe environment for public use of the park. The operation should be conducted to minimize harm and in special cases, promote vegetation growth to help protect the natural resources of the park. The natural resources of the park are impacted by the surrounding environment and weather conditions causing a continuing change to the ecological areas of the park. For these reasons, an annual evaluation of the park's "health" is needed to help establish a mowing plan for the coming year that will best fit the goals of public safety, maximize protection of natural resources, and planning budget and manpower needs for the park. This plan provides guidelines and is subject to change during the year based on the needs of the park as determined by the Park Manager.

The park is defined for mowing operations in two zones, "public use areas" and "other areas". The mowing operation for each zone will differ from one another to assist with meeting the goals of the park.

PUBLIC USE AREAS

"Public Use Areas" will have first priority in the scheduling of mowing operations. Mowing will be initiated in public use areas when vegetation growth reaches 30% coverage at eight inches tall. Mowing height will be set to four inches.

The following are designated as public use areas:

- The first and second parking lots
- Restroom building and area adjacent to the first parking lot
- Granite hiking trail and at least three feet on each side of trail
- Area surrounding each of the five picnic tables
- Roadway, Lakeview Drive, from entrance to the north road barrier, including designated off-road parking along drive. At least a five-foot right-of-way on each side of public vehicle roads will be mowed to provide visibility.

OTHER AREAS

The "Other Areas" will be mowed at designated times to control vegetation growth, provide protection for food sources, breeding and nesting of wildlife, provide visibility for public safety, and for general appearances of the park. The allowable vegetation heights and mowing heights will vary and be dependent on the area, on predicted weather conditions, and the time of year.

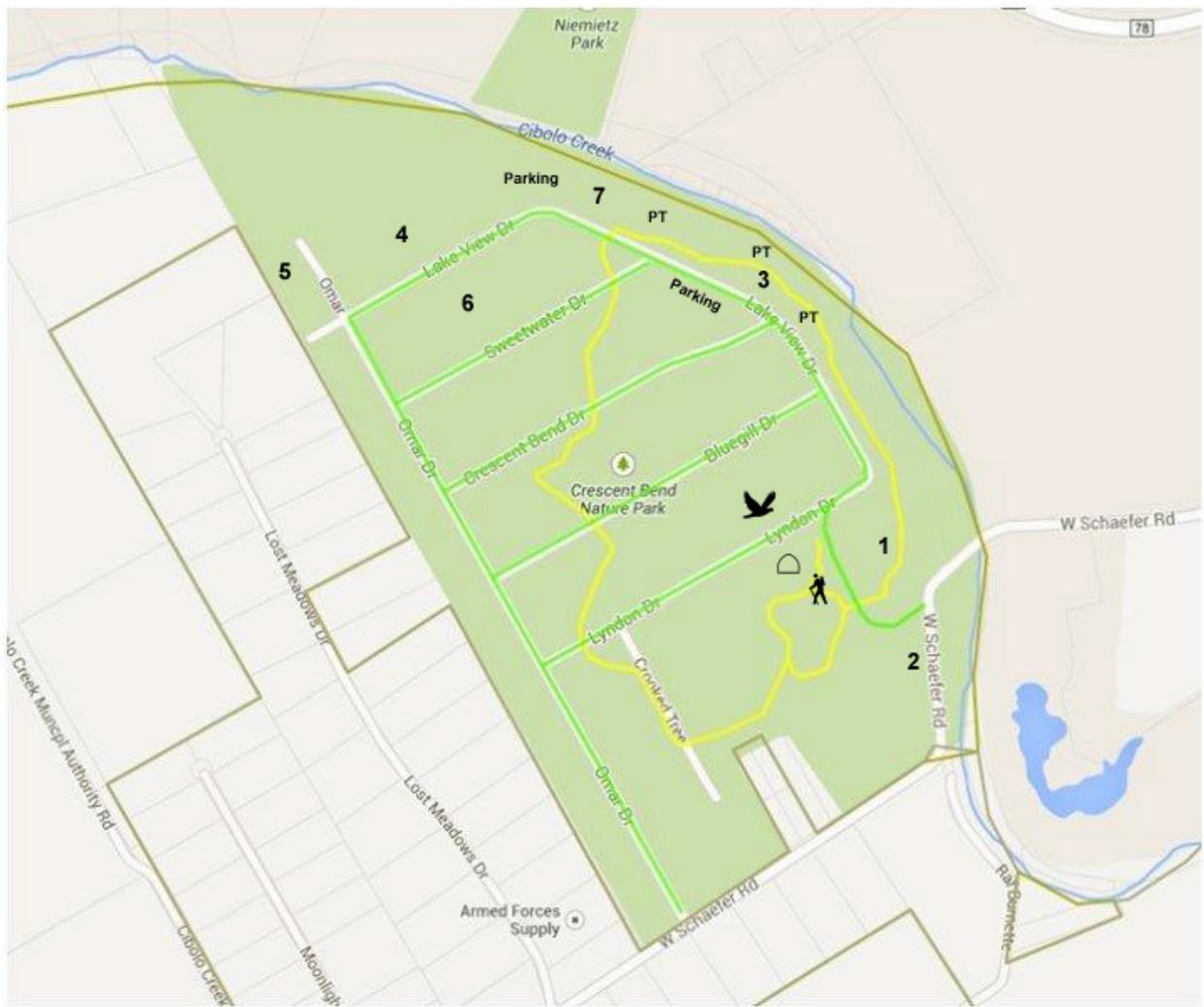
The zone of "Other Areas" is divided in three categories. The first category is the defined areas located near the entrance of the park and east along Lakeview Drive and in between the picnic tables. The inserted map has these areas marked as "1", "2", and "3". The second category is the non-public vehicle roadways located behind road barriers. The third category is areas in the northern section of the park designed as the savanna or grasslands. The inserted map has these areas marked as "4", "5", "6", and "7".

The designated areas 1, 2, and 3 will have second priority in the mowing operations. Initiating mowing is very dependent on existing plant life, weather conditions, and time of year. These areas may not require winter mowing, from October through January. The spring and summer mowing cycle should begin in February, prior to wildflower growth. During the weekly visual inspection of the park, a determination will be made to schedule mowing when vegetation growth reaches 30% coverage at eight inches tall, except when wildflowers are present. Mowing height should be set at 4-6 inches to protect plant life.

The non-public vehicle roadways will have third priority in the mowing operations. The goal is to control

the vegetation growth on the existing pavement and provide public safety. Mowing height should be set at four inches and cover at least one foot from pavement edge.

The designated areas 4, 5, 6, and 7 will have last priority in the mowing operations. The selection for mowing will be done in rotating years to provide regeneration of plant life in the grasslands. One area will be selected each year for mowing during the month of February or October based on needs to control vegetation growth. Mowing height will be based on existing plant life in area.



APPENDIX B VEGETATION MANAGEMENT PLAN

The plant life of Crescent Bend Nature Park is the base for all life existing in the park either directly or indirectly, providing the ecological habitats to support the diversity of wildlife. The management plan for plant life will encourage and enhance the continuation of the natural resources in the park with short-term and long-term projects. An annual survey and review of plant life will be conducted in March of each year to evaluate the “health” of the park to support wildlife and for public use.

The goals of the management plan are to provide a safe and pleasurable “nature” park for the general public to enjoy a natural environment while minimizing human impact and maximizing the native habitats of each ecological zone in the park.

The annual survey and review will make an evaluation of the following.

- Invasive plants, both native and non-native to the region
- Plant diseases
- Insect infestations
- Control of vegetation growth impacting public safety
- Natural and un-natural occurrences of erosion
- Occurrences of nature, such as Cibolo Creek flooding
- Human impact on natural resources
- General state of each ecological zone in the park

The annual survey and review will be conducted by Park Management and, if necessary, with consultation from appropriate outside resources to ensure the management plan will provide short-term and long-term benefits of the natural resources of the park. An annual vegetation management plan will be developed as a result to define appropriate actions and projects and to set priorities for the upcoming year. The management plan will include budget and manpower requirements for each approved action/project to ensure the availability of resources and plan completion. The development of long-term projects will be re-evaluated each year to ensure expected results and resources for the project.

The actions and projects must be defined with the following criteria before approval.

- Definition of project
- Approved/preferred methods for corrective actions
- Alternative methods for corrective actions
- Benefits, short-term and long-term
- Negative impacts, short-term and long-term
- Time of year for execution
- Estimated manpower and equipment needs
- Estimated budget
- Estimated completion
- Expected results

The annual management plan may be revised during the year by the Park Manager due to unforeseen circumstances such as acts of nature, changes to availability of resources, or needed re-evaluation of an approved project.