

Agenda Item Summary

1. ACTION REQUESTED/PURPOSE: Approve the recommendation made by the Conservation Land Acquisition and Stewardship Advisory Committee (CLASAC) that \$437,813 transferred from the Conservation 20/20 principal in 2001 be spent on management needs for Deep Lagoon Preserve, Pine Lake Preserve and the Conservation 20/20 portions of Hickey's Creek Preserve and Imperial Marsh Preserve.

2. WHAT ACTION ACCOMPLISHES: Provides Conservation 20/20 staff efficiency for implementing restoration projects for four preserves with approved stewardship and restoration plans without having to seek CLASAC and BoCC approval for each task.

3. MANAGEMENT RECOMMENDATION: Approve proposal to streamline restoration efforts at four Conservation 20/20 Preserves.

4. Departmental Category: // **CIA** **5. Meeting Date:** **09-13-2005**

6. Agenda: <input checked="" type="checkbox"/> Consent <input type="checkbox"/> Administrative <input type="checkbox"/> Appeals <input type="checkbox"/> Public <input type="checkbox"/> Walk-On	7. Requirement/Purpose: (specify)		8. Request Initiated: Commissioner Department Parks and Recreation Division By: John Yarbrough <i>John Yarbrough</i>
	<input type="checkbox"/> Statute		
	<input type="checkbox"/> Ordinance		
	<input type="checkbox"/> Admin. Code		
	<input checked="" type="checkbox"/> Other		

9. Background: In 2001, the BoCC approved a one-time transfer of \$600,000 from the Conservation 20/20 principal to be used for restoration projects on Conservation 20/20 preserves (Blue sheet number 20010679). To date, \$437,813 of the money remains. The original blue sheet required each restoration project to be approved by the Management sub-committee, the CLASAC and the BoCC prior to initiating restoration projects. Now that BoCC approved stewardship or restoration plans exist, approval of each restoration task at these preserves is redundant. The CLASAC recommends that the remaining money be spent on Deep Lagoon Preserve, Pine Lake Preserve and the 20/20 portions of Hickey's Creek Preserve and Imperial Marsh Preserve without further authorization by CLASAC, the Management Sub-Committee, and BoCC.

10. Review for Scheduling:

Department Director	Purchasing or Contracts	Human Resources	Other	County Attorney	Budget Services			County Manager/P.W. Director
					Analyst	Risk	Grants	Mgr.
<i>J. 7/2005</i>				<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>

11. Commission Action:

- Approved
- Deferred
- Denied
- Other

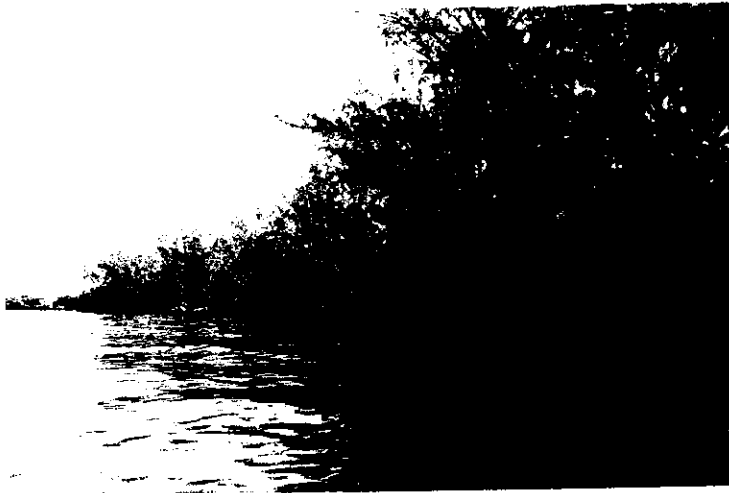
5/3/05
[Handwritten notes]

Rec. by CoAtty
Date: *8-30-05*
Time: *3:00*
Forwarded To:
Co. Mgr.
8-30-05

Beginning Balance		\$600,000	
FY 01/02			P.O. #
	3/13/2002 exotic plant removal	\$4,169	33163 site 102 - Yucca Pens
	5/20/2002 exotic plant removal	\$18,500	35750 site 134 - Prairie Pines, as part of fence line clearing
	5/31/2002 exotic plant follow up	\$10,350	35903 site 107-Yucca Pens
		<u>\$33,019</u>	
			\$566,981
FY 02/03			
	10/2/2002 hog removal	\$1,000	40819 site 108 - Caloosahatchee Creeks
	11/7/2002 chemicals	\$5,600	43175 various preserves
	12/17/2002 exotic plant removal	\$26,080	43661 site 138 - Yellow Fever Creek melaleuca removal along with fence line clearing
	2/28/2003 exotic plant follow up	\$6,475	44591 site 107- Yucca Pens
	3/4/2003 chemicals	\$1,000	44671 various preserves
	4/15/2003 exotic plant removal	\$2,264	53132 site 73 - Hickory Swamp
	8/4/2003 exotic plant removal	\$23,384	46519 site 147/168 - Pine Island Flatwoods removal of hazardous A. pines & adjacent exotics
	8/4/2003 exotic plant removal	\$13,700	46519 site 116 -Deep Lagoon exotic plant removal along road, 62 - Gator Hole exotic plant removal for fireline clearing
		<u>\$79,503</u>	
			\$487,478
FY 03/04			
	10/1/2003 hog removal	\$900	50153 various preserves
	10/1/2003 chemicals	\$400	50109 various preserves
	10/2/2003 exotic plant follow up	\$6,000	50827 various preserves
	12/9/2003 exotic plant follow up	\$4,969	53132 site 73 - Hickory Swamp
	4/1/2004 chemicals	\$2,300	55385 various preserves
	5/12/2004 fire break/brush reduction	\$3,892	55906 site 82 - Caloosahatchee Creeks
	6/2/2004 exotic plant removal	\$19,744	53132 Hickey's Creek C 20/20 portions
	6/2/2004 exotic plant removal	\$1,988	53132 site 175 - Caloosahatchee Creeks
	8/23/2004 prescribed fire supplies	\$1,392	57297 various preserves
	9/23/2004 exotic plant removal	\$8,080	57923 site 90's - Charlotte Harbor
		<u>\$49,665</u>	
			\$437,813

Deep Lagoon Preserve (site #116)

The Parks and Recreation department is applying for a grant from the Florida Department of Agriculture and Consumer Services for \$175,000 for exotic plant removal. It requires a match of 25%. We have met with a contractor, who has the equipment and experience in working in this type of area. The plan is for mechanical removal of exotics where he is able to access the area with heavy equipment (Phase 1), hand removal of exotics where there are access problems and/or lots of native plants (Phase 2) and a sweep of the entire 120-acre peninsula to treat in place the remaining exotics. In addition, they will provide a follow up treatment for resprouts and new seedlings. If we do not receive the grant, we would still have the contractor conduct some of the work, probably focusing on Phase 1 areas.



This is an excerpt from the DLP Stewardship Plan

Exotic plant removal and maintenance

The dominant invasive exotic plants at DLP are melaleuca, Brazilian pepper and Australian pine. The goal will be to remove or treat these plants in place, followed with semi-annual treatment of resprouts and new seedlings. Before any work is conducted an exotic prescription form will be filled out and the contractor will be required to fill our daily report forms, which are both found in the Land Stewardship Operations Manual.

- Light to moderate infestations (except along ditches of northern peninsula of Preserve in Unit 10):

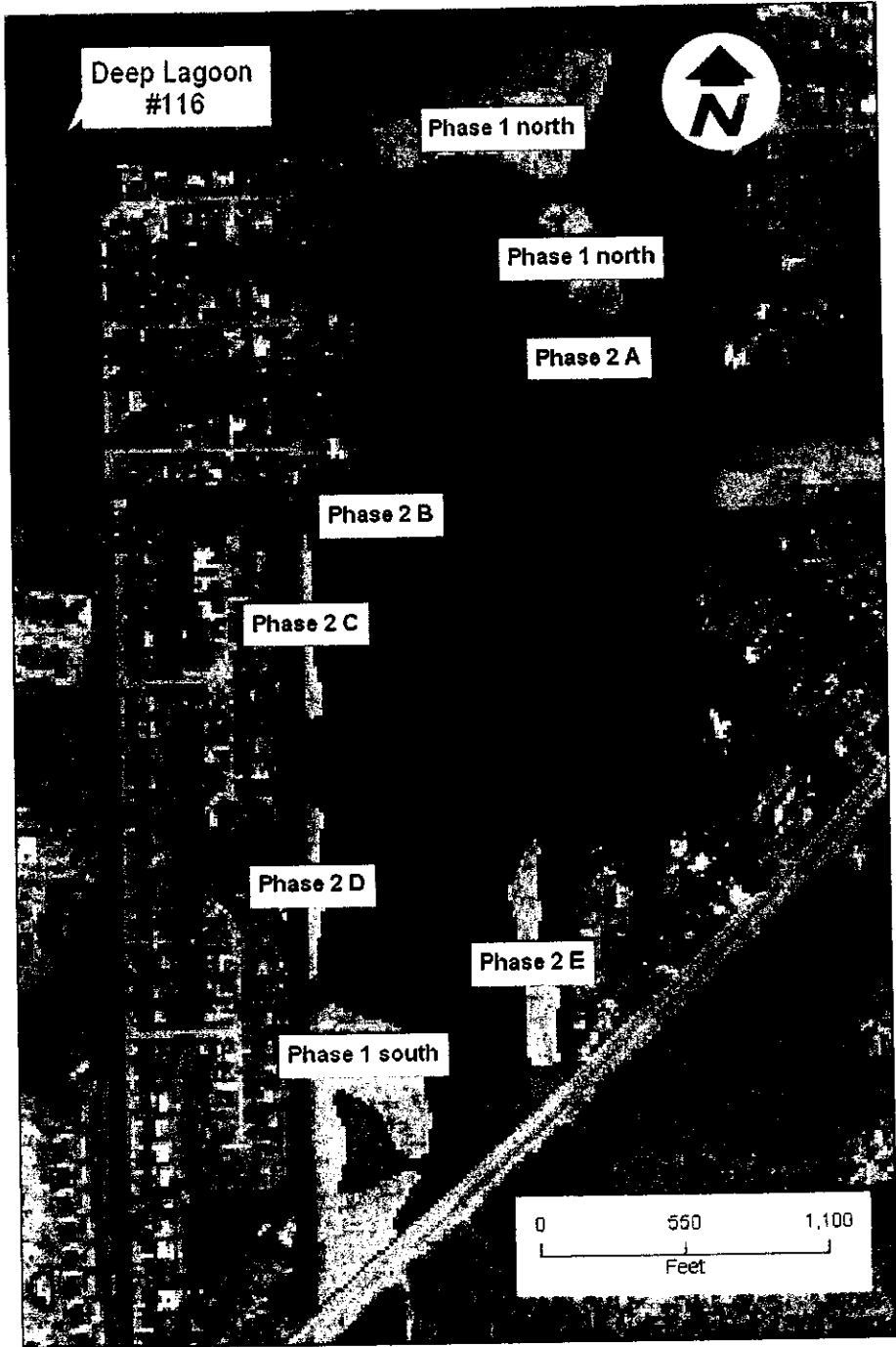
In areas where invasive exotics are sporadic and below 50% of the vegetation cover, handwork will be utilized for control. Specific methodology will depend on stem size, but generally the stem will be cut near grade and stump sprayed with appropriate herbicide. Hand pulling should be utilized when possible to minimize herbicide use. Stems will be piled as necessary to facilitate future potential burning, chipping or removal from site. No replanting will be needed in these areas due to significant presence of native vegetation and native seed bank.

- Moderate to heavy infestations (except along ditches of Unit 10 and surrounding the bald eagle nest on Unit 13):

In areas where the exotics occur as monotypic stands or are higher than 50% of the vegetation cover the use of heavy equipment will be utilized in appropriate habitats and during suitable seasonal conditions. The type of heavy equipment used should minimize soil disturbance or compaction. A barge will be necessary for bringing heavy equipment to Unit 9 as well as the west boundary of Unit 10. In areas along ditches where the hydrology and soils may not be conducive for heavy equipment, hand crews will be used to cut down and mulch, pile and/or burn the plants depending on site conditions. For follow-up treatment of these areas an application of an appropriate herbicide mixture to the foliage of any resprouts or seedlings will be made. Land Stewardship staff will evaluate replanting on a case-by-case basis. Units 1 & 4, that have already undergone exotic plant removal, may be replanted in 2006 after monitoring for native plant recruitment.

- Scattered exotics on berms associated with ditches on northern peninsula (Unit 10):

The exotic plant typically found on these berms is Brazilian pepper, however an occasional small Australian pine and melaleuca tree have been spotted. These berms are only accessible by canoeing. For that reason, they will be treated in place.



Imperial Marsh Preserve (site #93)

Imperial Marsh Preserve is divided into 3 different sections in relation to restoration funds. The southern half will be restored utilizing T & T funds. Lee County DOT is removing the exotics from the northern 47 acres. The remaining pasture does not have a funding source. We recommend utilizing the funds so that this pasture can be restored in conjunction with the work conducted on the T & T portion.



This is an excerpt from the IMP Stewardship Plan

B. Goals and Strategies

The primary management objective for Imperial Marsh Preserve will be pasture renovation in the abandoned agricultural fields that comprise 75% of the Preserve. Pasture renovation activities will include leveling old farm field furrows, filling ditches and removal and control of exotic species by September 2010.

Pasture Renovation

To add community diversity to the Preserve, staff will restore 177 acres of improved pastures with native plant communities (Units 1 and 5). An environmental consultant will be hired to assist in the pasture renovation process. Renovation will require several months of data collection in order to determine appropriate plant communities. Deep soil samples will be taken and analyzed in several portions of the pasture. A rain gauge and monitoring wells will be set up in strategic areas to monitor water levels over a rainy season and a portion of the dry season. Once the data are analyzed, appropriate plans for native plantings will be developed. Replanting options may include seeds, plants or a combination of both.

The area will be re-graded using heavy equipment creating some upland areas where large oaks are currently present and wetlands in lower areas where soils indicate hydric conditions and large trees are not present. Invasive exotic species, such as Brazilian pepper and native species, especially wax myrtle, that have become dominant due to the lack of fire or disturbance in this area will be removed during the re-grading process. The small ditches around the two dome swamps will be back filled. The cow well located on the western side of the pasture will be re-contoured to resemble a more natural wetland.

Once the area has been re-graded, pasture grasses will need to be removed in order to prepare for planting. This will be accomplished by repeated disking followed by treating the exotic pasture grasses with an appropriate herbicide. Once the exotic plants are under control, the established planting plan will be executed. The re-contoured cow well will be replanted with native species.

Photo points will be established before renovation work begins in order to track the progress of the project. A baseline photo will be taken, followed by biannual photos during the elimination of pasture grasses and planting phases. Finally, annual photos will be taken during the growing season for 5 years from completion of the planting project as documentation of the process. A consultant may also be contracted to create two 10 meter transects and monitor the plants within them over a five year period.

Ditches border all of the abandoned farm fields. A double ditch that runs north/south through the center of Unit 1 will be back-filled and leveled. The ditch on the western boundary is entirely on the adjacent property and restoration will need to be coordinated with SFWMD and the Corkscrew Mitigation Bank to approve and possibly fund this work. All of the existing vegetation within the ditches, mostly Brazilian pepper, will be cleared and piled for burning. Some small, isolated wetlands may be created in areas where there is not enough fill present. The northern and western borders of Unit 5 have smaller single ditches that will need to be filled completely. Small wetlands can be created in these areas if there is not enough fill to level the ditches.

Imperial
Marsh
Preserve



DOT Mitigation Area

C 20/20 Area

T and T Area

Pine Lake Preserve (site #119)

Pine Lake Preserve has already received a pledge of money from the SFWMD for exotic plant removal. The Robert's Group has presented a proposal for improvements to the lake. One of the remaining projects, which we propose to use the restoration money for, will be to backfill the interior ditches.



This is an excerpt from the PLP Stewardship Plan

The primary management objectives for Pine Lake Preserve will be to improve the hydrology by increasing water flow onto the Preserve, slowing drainage within the boundaries of the Preserve and improving the Pine Lake and Kehl Canal to provide increased habitat for wildlife by December 31st 2009.

Restoring Hydrology

Restoring the Preserve's altered hydrology will be difficult due to surrounding influences. The four activities to restore this hydrology will be to fill and/or plug several internal ditches, improve Kehl Canal to slow water flow, enhance littoral zones around Pine Lake and redirect some of the sheetflow from the CREW lands to the east to flow under Bonita Grande Drive and onto PLP.

Ditch 1, which runs from the northern access gate to the borrow pit, will be completely filled in using on-site material that does not contain vegetation (Figure 18). There is some vegetation on the berm that will be cleared, piled and burned in Unit 4 where exotics are piled during exotic plant removal. Spoil material from the creation of the original ditch is still present and will be used to fill the ditch once vegetation is removed. If any extra fill is needed, it will come from the borrow pit area where the shallow littoral zone will be created. Figure 18 shows the possible location of 2 plugs to be placed in Ditch 2. These two locations are conceptual and research will need to be done to determine the best location. This will slow the water flow to the borrow pit and Kehl Canal in hopes of re-hydrating the northeast corner of the Preserve. Vegetation on the berm may need to be removed prior to installing the plugs. All fill material will come from the existing berm resulting from the original creation of the ditch.

Pine Lake Preserve
#119



Legend
--- Ditch 1
--- Ditch 2
--- Proposed Plug

Hickey's Creek Mitigation Park

There are three small projects on different C20/20 additions to Hickey's Creek Mitigation Park.

(site #4)

The agricultural ditches on #4 are slated for filling to restore the hydrology of Hickey's Creek Mitigation Park and allow for sheetflow to enter the creek instead of the rapid runoff the ditches currently provide. Additionally, there are 2 cow wells where the fill piled up around the excavations will be graded allow for greater utilization of the "ponds" by wildlife. Appropriate native species of herbaceous vegetation would be planted on the graded soil. Long-term management involves restoration of the site through the planting of Florida slash pine trees and other flatwood herbaceous species. At this time the site is not ready for full restoration, but we suggest an initial planting of pines.



(site #101)

Currently Brazilian pepper and several other invasive species from landscaping on private lands adjacent to #101 need to be treated and removed. Several of the #101 parcels were cleared by former owners and would benefit from plantings of native shrub species similar to those found on the uncleared parcels



(site #127)

Long-term management for this parcel includes the restoration of pastures and excavations. Brazilian pepper growing on the spoil piles will be removed. Afterwards, fill piled up around the excavations will be graded allow for greater utilization of the "ponds" by wildlife. Appropriate native species of herbaceous vegetation would be planted on the graded soil. Bald cypress, laurel oak and water hickory would be incorporated into the overall area.



These are excerpts from the HCMP Stewardship Plan

Parcel #4

Environmental Management: The management of this site has been incorporated into the HCMP Stewardship Plan. Short-term management activities will include a continued cattle lease to control unwanted infestation by invasive exotic plant species. Long-term management activities include restoration of the site with plantings of slash pines and native scrub species and prescribed burns to improve the habitat for the federally threatened Scrub jay.

Parcel #101

Environmental Management: The management of this site has been incorporated into the HCMP Stewardship Plan. Long-term management activities include removal of exotic vegetation and possible prescribed burning. Burning at this site may be limited due to the proximity of single family homes.

Parcel #127

Environmental Management: This site has been incorporated into the HCMP Stewardship Plan. A pole barn, improved pasture, and excavations are located at the northeast corner of this site. Long-term objectives include the restoration of pastures and excavations and removal of the pole barn.

