



BABCOCK RANCH

Curry Lake Restoration as an example
Restoration Weirs similar to Curry Lake weir

Proposed Development
Utilizes Disturbed Areas
History of Wetlands off and on-site
Restoration of more historic conditions
Rain Gardens
Bio Swales
Master Drainage System
Filter Marshes

Babcock Ranch Concepts as a model for replication



BABCOCK RANCH





BABCOCK RANCH



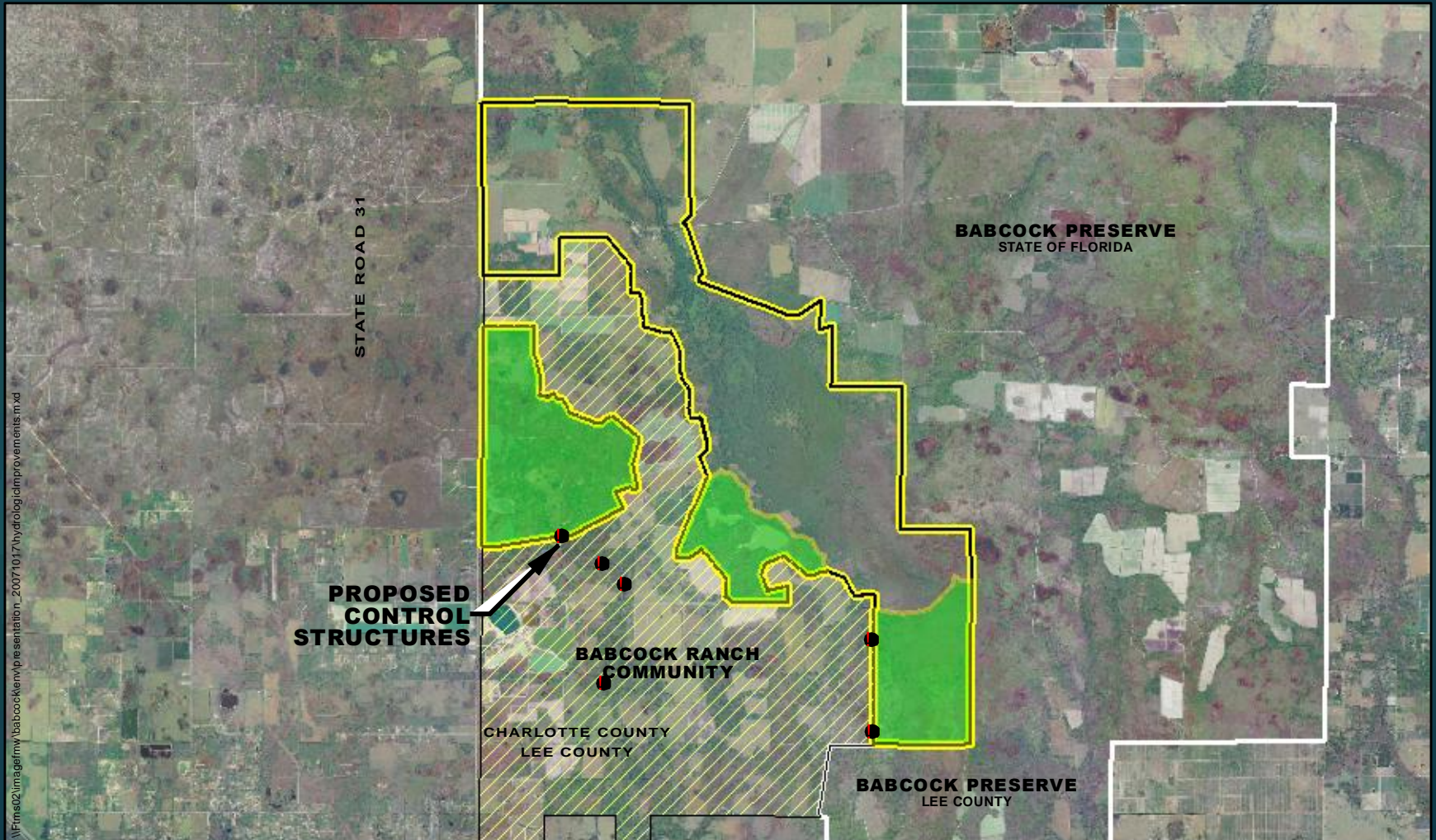


BABCOCK RANCH





BABCOCK RANCH

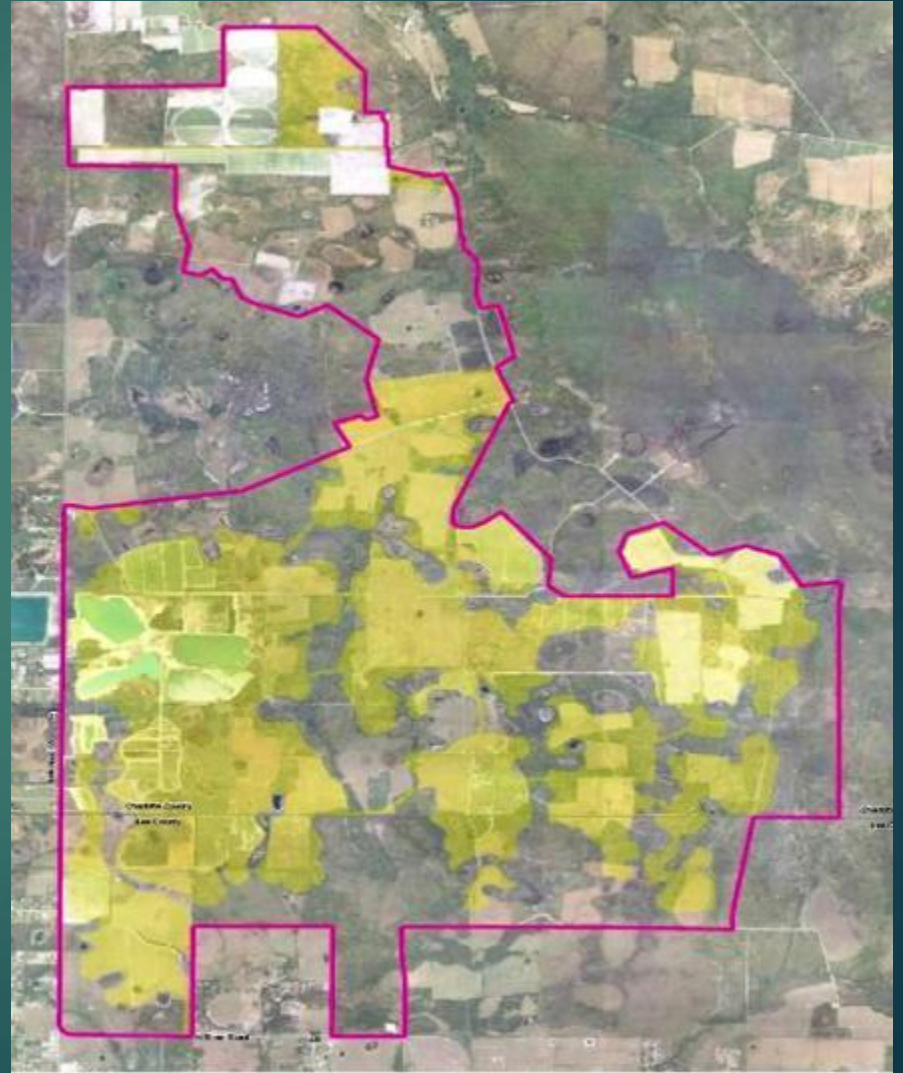




BABCOCK RANCH

Proposed Development

- Working with nature
- Utilizing disturbed areas

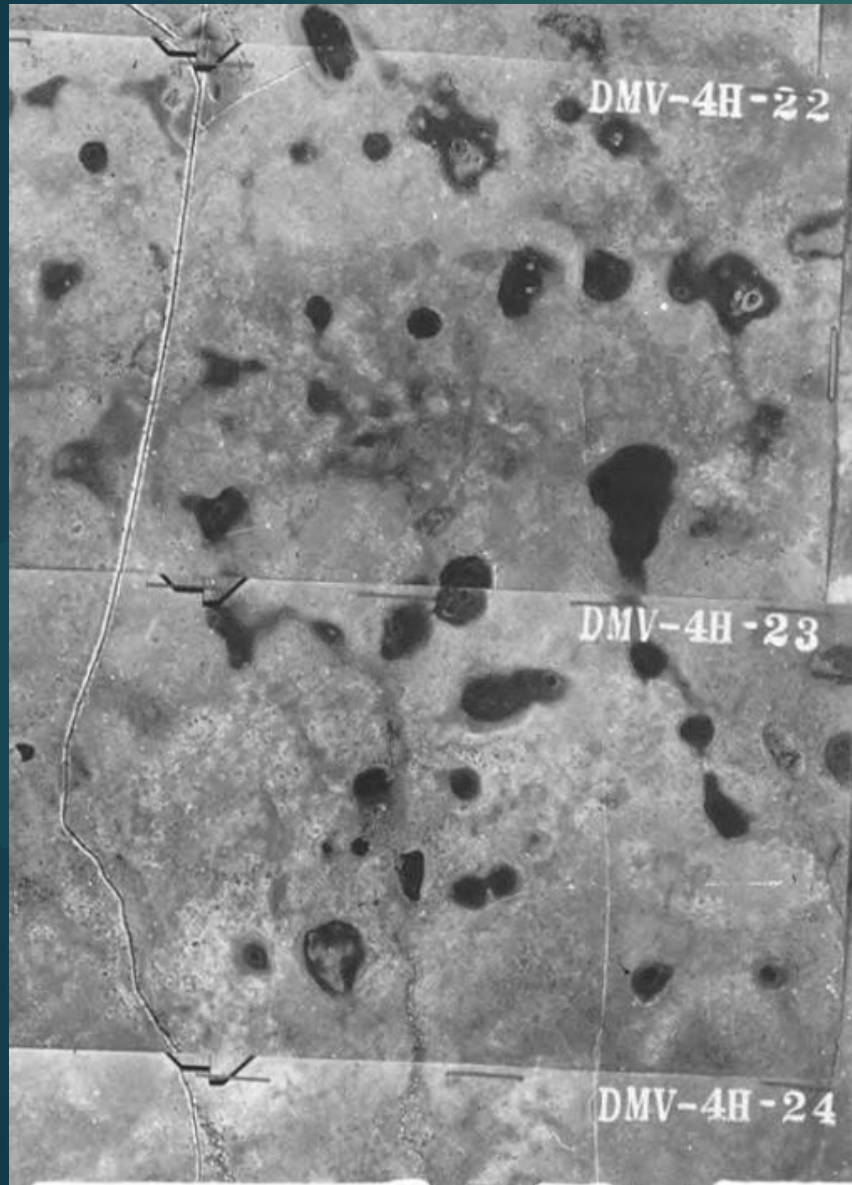




BABCOCK RANCH



▶ 1953



Source: <http://ufdc.ufl.edu/aerials>

▶ 1999



Source: Google Earth



BABCOCK RANCH

Summary of Literature-Based Runoff Concentrations For Selected Land Use Categories in Florida

Land Use Category	Typical Runoff Concentration (mg/l)						
	TN	TP	BOD	TSS	Cu	Pb	Zn
8. Agricultural							
a. Pasture	3.47	0.616	5.1	94.3	--	--	--
b. Citrus	2.24	0.183	2.55	15.5	0.003	0.001	0.012
c. Row Crops	2.65	0.593	--	19.8	0.022	0.004	0.030
d. General Ag.	2.79	0.431	3.8	43.2	0.013	0.003	0.021



BABCOCK RANCH

Proposed Development

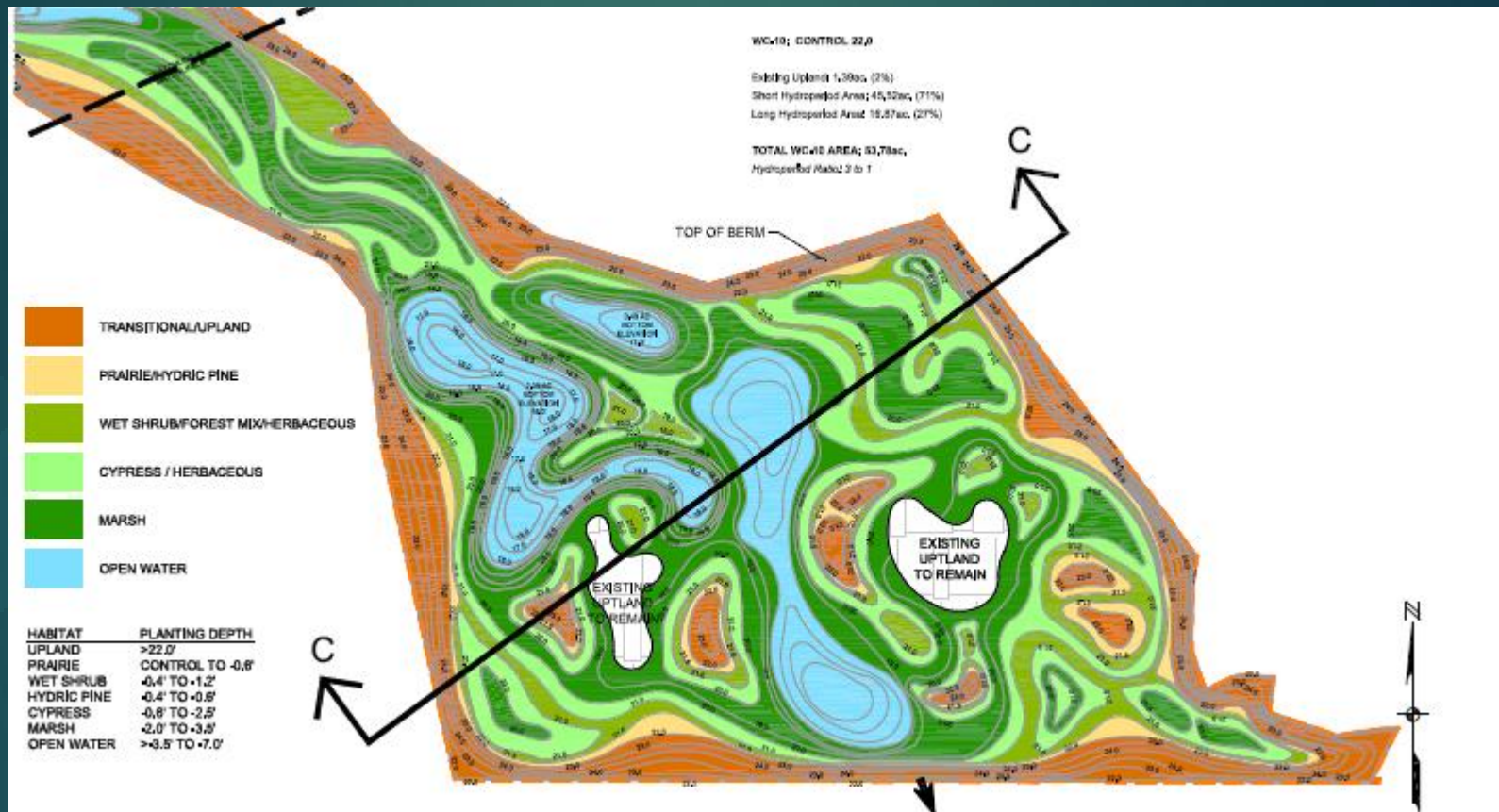
- Rain Gardens for Treatment
- Bioswales for Conveyance
- Nature Trails for Education







BABCOCK RANCH



Trout Creek - Post

Tract	Runoff (ac-ft/yr)	TN Load (kg/yr)	TP Load (kg/yr)
A	3339	2413	90.4
B	0	0	0
C	843	791	36.7
D	866	871	33.8
E	532	389	11.6
F	504	255	6.0
G	0	0	0
H	0	0	0
I	0	0	0
J	85.0	135.8	6.2
Totals:	6169	4854	184.7

Trout Creek - Pre

Tract	Runoff (ac-ft/yr)	TN Load (kg/yr)	TP Load (kg/yr)
A	2466	4974	637
B	47.1	122	16.8
C	723	1914	265
D	686	1683	218
E	539	1245	157
F	279	689	89.5
G	0	0	0
H	17.0	35.5	3.7
I	18.2	56.8	8.4
J	24.7	40.4	3.7
Totals:	4801	10760	1399

Owl Creek - Post

Tract	Runoff (ac-ft/yr)	TN Load (kg/yr)	TP Load (kg/yr)
A	0	0	0
B	426	582	20.2
C	0	0	0
D	0	0	0
E	0	0	0
F	0	0	0
G	0	0	0
H	0	0	0
I	0	0	0
J	0	0	0
Totals:	426	582	20.2

Owl Creek - Pre

Tract	Runoff (ac-ft/yr)	TN Load (kg/yr)	TP Load (kg/yr)
A	0.0	0.0	0.0
B	351	968	138
C	0	0	0
D	0	0	0
E	0	0	0
F	0	0	0
G	0	0	0
H	0	0	0
I	0	0	0
J	0	0	0
Totals:	351	968	138

Telegraph Creek - Post

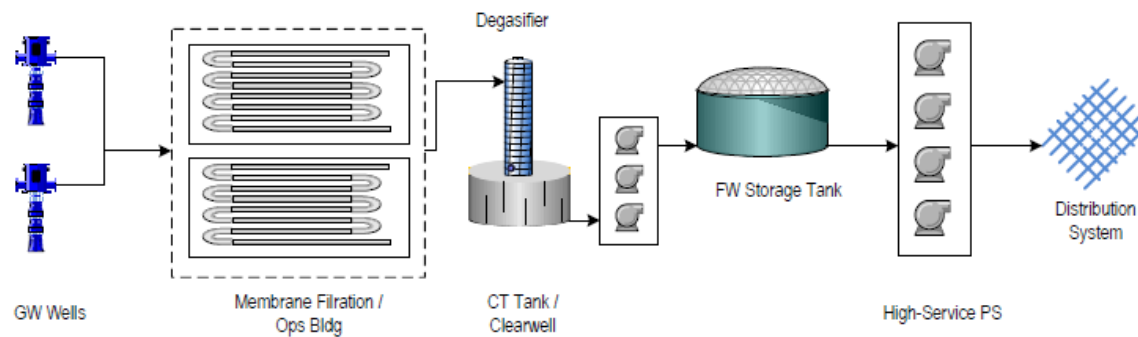
Tract	Runoff (ac-ft/yr)	TN Load (kg/yr)	TP Load (kg/yr)
A	0	0	0
B	0	0	0
C	0	0	0
D	0	0	0
E	0	0	0
F	0	0	0
G	411	238	5.2
H	627	423	10.3
I	349	208	4.9
J	0	0	0
Totals:	1386	868	20.4

Telegraph Creek - Pre

Tract	Runoff (ac-ft/yr)	TN Load (kg/yr)	TP Load (kg/yr)
A	0	0	0
B	0	0	0
C	0	0	0
D	0	0	0
E	0	0	0
F	38.0	54.3	2.8
G	225	455	48.1
H	490	1270	168.5
I	132	204	12.3
J	0	0	0.0
Totals:	885	1984	231.6

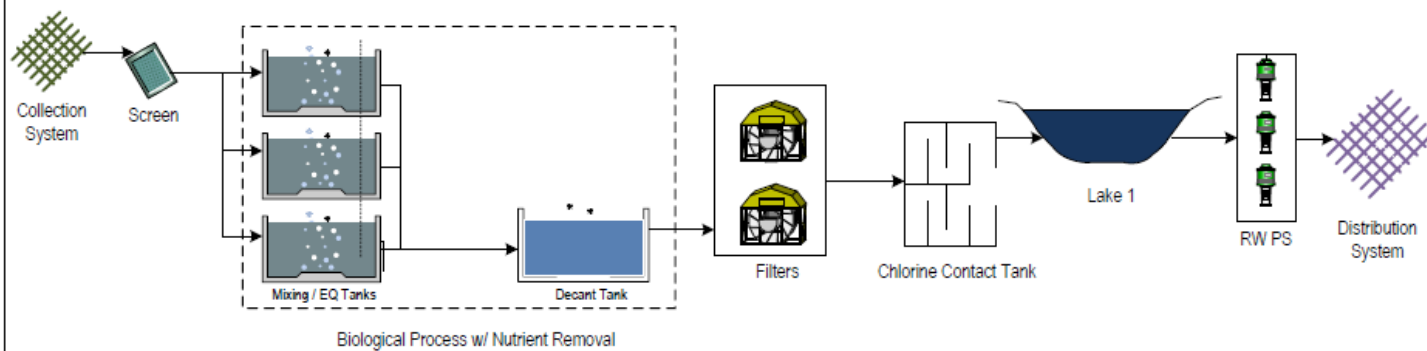
Babcock Ranch Utilities

BABCOCK RANCH COMMUNITY UTILITY SITE
Process Flow Diagram for Water Treatment Facility



Babcock Ranch Utilities

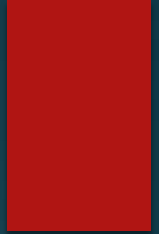
BABCOCK RANCH COMMUNITY UTILITY SITE
Process Flow Diagram for Water Reclamation Facility



Babcock Ranch Utilities



BABCOCK RANCH





BABCOCK RANCH

