



# APPENDIX E

EVERGLADES NATIONAL PARK

## Appendix E: Everglades National Park

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#### SUMMARY DESCRIPTION OF VEGETATION CATEGORIES REFERENCED IN APPENDIX

Vegetation Category	Vegetation Subcategories
Agriculture / Disturbed Land / Developed Area	Agriculture areas, barren lands, mixed grasslands, drought-deciduous shrublands, shrub and brush lands, and exotic plants.
Grassland / Coastal Strand	Dry prairies, coastal grasslands, coastal strands, and coastal uplands.
Mangrove	Mangrove fringe, mangrove forest and woodland, and mangrove shrubland.
Coastal Marsh	Salt marshes, salt flats, and salt ponds.
Sawgrass Marsh / Wet Prairie / Freshwater Marsh	Freshwater marshes and wet prairies.
Shrubland	Sclerophyllous evergreen shrublands, mixed dry shrublands, gallery shrublands, thicket scrub, coastal scrub, thorn scrub, and coastal hedge. In the Virgin Island parks it includes gallery shrublands, mixed, dry shrublands, and coastal hedge.
Upland Dry / Mesic Forest	Tropical hardwood hammocks, pine flatwoods, south Florida rocklands, mixed hardwood/pine forests, coastal hammock, xeric oak scrub, oak-saw palmetto scrub, drought-deciduous forests, semi-deciduous forests, gallery semi-deciduous forests, semi-evergreen forests, evergreen woodlands, gallery semi-deciduous woodlands, semi-deciduous woodlands, drought-deciduous woodlands, upland moist forests, and gallery moist forests.
Wetland Forest	Mixed cypress strands, cypress sloughs, cypress domes, bay swamps, hardwood swamp forests, basin moist forests, mixed swamps, and shrub swamps.





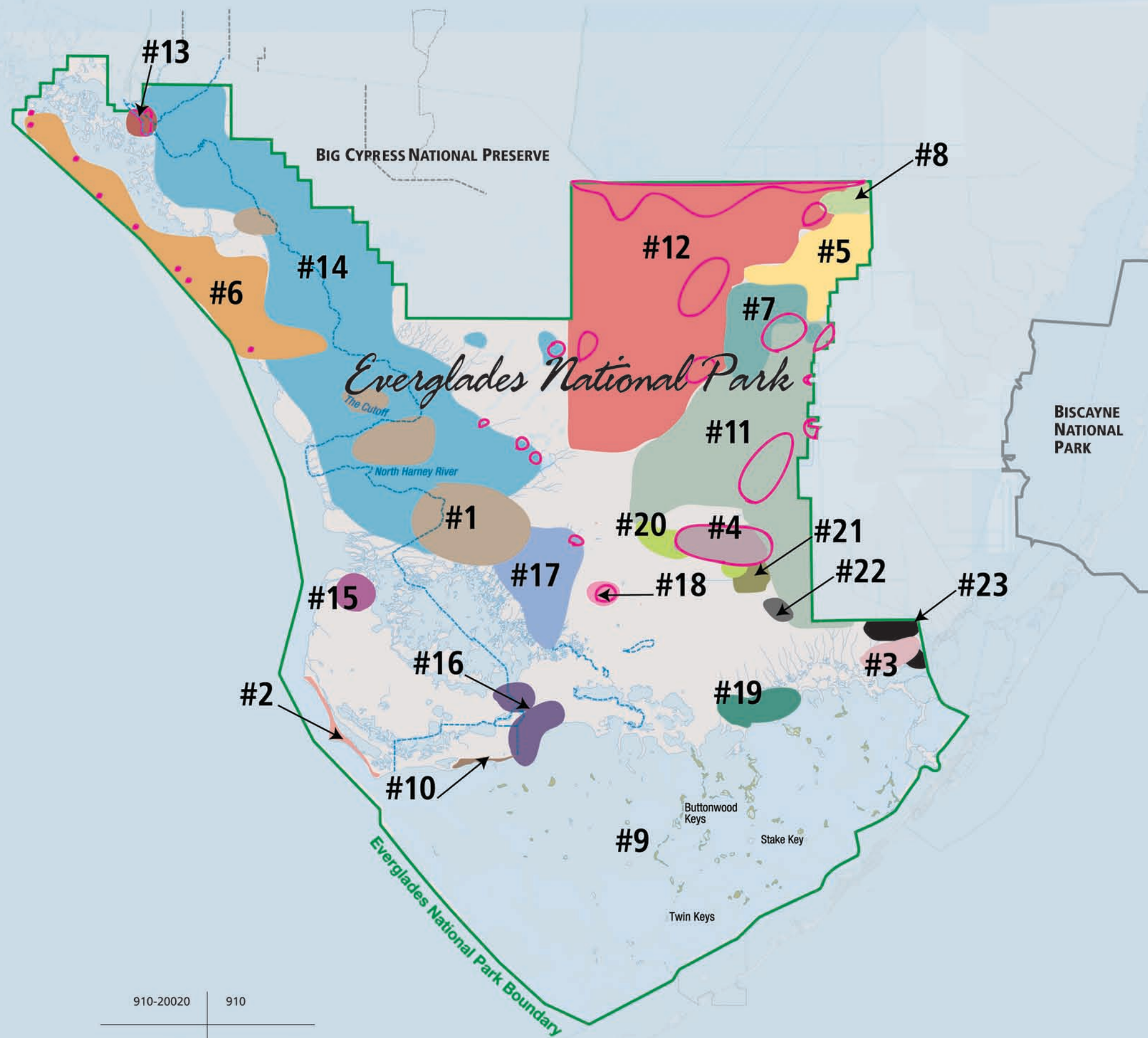
#### VEGETATION CATEGORIES

- Agriculture/Disturbed Land/Developed Area (including roads)
- Grassland/Coastal Strand
- Mangrove
- Coastal Marsh
- Sawgrass Marsh/Wet Prairie/Freshwater Marsh
- Upland Dry/Mesic Forest
- Wetland Forest
- Open Water
- Anchorage
- Boat Launch
- Interpretive Trail
- National Park Service Campground
- Picnic Area
- Canoe Trail
- Hiking Trail



910-20021	910
EPMP	September 2006





#### TREATMENT AREAS

- |  |                    |
|--|--------------------|
| Areas Appropriate for Active Restoration | Treatment Area #13 |
| Treatment Area #1                        | Treatment Area #14 |
| Treatment Area #2                        | Treatment Area #15 |
| Treatment Area #3                        | Treatment Area #16 |
| Treatment Area #4                        | Treatment Area #17 |
| Treatment Area #5                        | Treatment Area #18 |
| Treatment Area #6                        | Treatment Area #19 |
| Treatment Area #7                        | Treatment Area #20 |
| Treatment Area #8                        | Treatment Area #21 |
| Treatment Area #9                        | Treatment Area #22 |
| Treatment Area #10                       | Treatment Area #23 |
| Treatment Area #11                       | Canoe Trail        |
| Treatment Area #12                       | Hiking Trail       |



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## APPENDIX E: EVERGLADES NATIONAL PARK

**TABLE E-1: ACRES WITHIN VEGETATION CATEGORIES THAT  
COULD POTENTIALLY BE RESTORED UNDER ALTERNATIVES A, B, AND C<sup>a</sup>**

Vegetation Category	Alternative A	Alternative B	Alternative C	
	Potential Acres Passively Restored	Potential Acres Passively Restored	Potential Acres Passively Restored	Potential Acres Actively Restored
<b>Everglades National Park</b>				
Agriculture / Disturbed Land / Developed Area (including roads)	2,075	2,075	0	2,075
Grassland / Coastal Strand	171	171	97	74
Mangrove	2,802	2,802	2,764	38
Coastal Marsh	2,004	2,004	1,840	164
Sawgrass Marsh / Wet Prairie / Freshwater Marsh	42,689	42,689	29,921	12,768
Shrubland	258	258	258	0
Upland Dry / Mesic Forest	14,189	14,189	12,989	1,200
Wetland Forest	91,257	91,257	77,068	14,189
<b>Total</b>	<b>155,445</b>	<b>155,445</b>	<b>124,937</b>	<b>30,508</b>

a. Although treatments would occur under alternative A to control exotic plant species, it is assumed that within the life of the plan all acres may not be restored. Under alternatives B and C, it is assumed all acres would be restored due to re-treatment of exotic plant species under an optimal re-treatment schedule (see the "Alternatives" Chapter, Alternative B, Maintaining Treated Sites section).

### Key to Table E-2 below

- Gross infested acres of exotic plants within Everglades National Park were based on data collected by the NPS exotic plant management team (APCAM database and aerial data) and by park staff.
- Initial treatment methods for each area under alternative A were based on data provided by EPMT in the APCAM database or from communications with park staff (see the "Alternatives" Chapter, Initial Treatment section). Initial treatment methods for alternatives B and C were determined by application of the treatment method decision tool (see the "Alternatives" Chapter, Treatment Method Decision Tool section).
- Re-treatment methods under alternative A were assumed to be the same as initial treatment (see the "Alternatives" Chapter, Maintaining Treated Sites section). Re-treatment methods under alternatives B and C were determined by application of the new treatment method decision tool (see the "Alternatives" Chapter, Treatment Method Decision Tool section).
- Herbicides applied under alternative A are based on prior treatment data provided by EPMT or the park staff. Herbicides that could be applied under alternatives B and C were determined based on the exotic species present.
- The potential herbicide use under all alternatives was calculated based on the average use of each herbicide within the parks in the past 5 years as provided in the APCAM database. The average application rate of metsulfuron methyl was 0.05 undiluted gallons; glyphosate was 0.14 undiluted gallons; imazapyr was 0.20 undiluted gallons; and triclopyr was 0.91 undiluted gallons. To determine the range of potential herbicide use for treatment areas under alternative A, the average application rate was multiplied by the gross infested acres. This same calculation was used to calculate the range of potential herbicide use under alternatives B and C. See the "Environmental Consequences" Chapter, Treatment and Re-treatment of Exotic Plants section for further explanation.
- Under alternatives A and B all treatment areas would be restored passively. Under alternative C, areas within the park where active restoration could take place was based on a decision framework described in "Environmental Consequences" Chapter, Proposed Restoration Program.
- Treatment area #4 is Hole-in-the-Donut which is an active restoration project that is being implemented as part of another planning project and herbicide applications that may occur there were not considered as part of this EPMP/EIS.



**TABLE E-2: EVERGLADES NATIONAL PARK**  
**ALTERNATIVE SUMMARY TABLE OF TREATMENT AREAS WITHIN THE PARK**

Treatment Area ID	Priority for Treatment	Exotic Species	Gross Infested (acres) <sup>a</sup>	Initial Treatment Methods <sup>b</sup>	Re-treatment Method <sup>c</sup>	Herbicides <sup>d</sup>	Total Initial Herbicide Applied to Treatment Area (undiluted gal.) <sup>e</sup>	Vegetation Category	Sensitive Resources	Restoration <sup>f</sup>
<b>Alternative A</b>										
1	NA	Lygodium Brazilian pepper	17,792	Foliar aerial Foliar ground Fire Manual pulling Biological control	Same as initial treatment	Metsulfuron methyl Triclopyr	890–16,191	Mangrove Coastal Marsh	Wood stork American crocodile E. indigo snake Cultural resources	Passive
2	NA	Brazilian pepper Lather leaf Lead tree	182	Basal bark Manual pulling	Same as initial treatment	Triclopyr	166	Grassland / Coastal Strand Mangrove Coastal Marsh	Wood stork American crocodile E indigo snake Cultural resources	Passive
3	NA	Australian pine	133	Basal bark Manual pulling	Same as initial treatment	Triclopyr	121	Mangrove Coastal Marsh	American crocodile	Passive
4 <sup>g</sup>	NA	Brazilian pepper	3,306	Mechanical treatments including soil removal	—	—	0	Agriculture / Disturbed Land / Developed Area (including roads) Grassland / Coastal Strand Sawgrass Marsh / Wet Prairie / Freshwater Marsh Upland Dry / Mesic Forest Wetland Forest	Wood stork E. indigo snake Cape sable seaside sparrow Florida panther Cultural resources Visitor use areas	Active Passive

**TABLE E-2: EVERGLADES NATIONAL PARK  
ALTERNATIVE SUMMARY TABLE OF TREATMENT AREAS WITHIN THE PARK (CONTINUED)**

Treatment Area ID	Priority for Treatment	Exotic Species	Gross Infested (acres) <sup>a</sup>	Initial Treatment Methods <sup>b</sup>	Re-treatment Method <sup>c</sup>	Herbicides <sup>d</sup>	Total Initial Herbicide Applied to Treatment Area (undiluted gal.) <sup>e</sup>	Vegetation Category	Sensitive Resources	Restoration <sup>f</sup>
5	NA	Melaleuca Australian pine Brazilian pepper	22,317	Cut/stump leave Basal bark Manual pulling Biological control	Same as initial treatment	Imazapyr Glyphosate Triclopyr	3,124–20,308	Agriculture / Disturbed Land / Developed Area (including roads) Sawgrass Marsh / Wet Prairie / Freshwater Marsh Upland Dry / Mesic Forest Wetland Forest	Wood stork E. indigo snake Everglades snail kite Florida panther	Passive
6	NA	Brazilian pepper Lather leaf Seaside mahoe Scaevola	79	Basal bark Manual pulling	Same as initial treatment	Triclopyr	72	Mangrove Beach / Dune	Wood stork E. indigo snake Cultural resources	Passive
7	NA	Melaleuca Australian pine Brazilian pepper	12,914	Cut/stump leave Basal bark Manual pulling Biological control	Same as initial treatment	Imazapyr Glyphosate Triclopyr	1,808–11,752	Agriculture / Disturbed Land / Developed Area (including roads) Sawgrass Marsh / Wet Prairie / Freshwater Marsh Upland Dry / Mesic Forest Wetland Forest	Wood stork E. indigo snake Cape sable seaside sparrow	Passive
8	NA	Melaleuca	2,193	Cut surface Manual pulling Biological control	Same as initial treatment	Imazapyr Glyphosate	300–439	Sawgrass Marsh / Wet Prairie / Freshwater Marsh Wetland Forest	Wood stork E. indigo snake Everglades snail kite	Passive





**TABLE E-2: EVERGLADES NATIONAL PARK  
ALTERNATIVE SUMMARY TABLE OF TREATMENT AREAS WITHIN THE PARK (CONTINUED)**

Treatment Area ID	Priority for Treatment	Exotic Species	Gross Infested (acres) <sup>a</sup>	Initial Treatment Methods <sup>b</sup>	Re-treatment Method <sup>c</sup>	Herbicides <sup>d</sup>	Total Initial Herbicide Applied to Treatment Area (undiluted gal.) <sup>e</sup>	Vegetation Category	Sensitive Resources	Restoration <sup>f</sup>
9	NA	Australian pine Brazilian pepper Lather leaf Seaside mahoe	146	Basal bark Manual pulling	Same as initial treatment	Triclopyr	110	Mangrove Coastal Marsh	Wood stork American crocodile E. indigo snake Cultural resources	Passive
10	NA	Brazilian pepper Seaside mahoe Lather leaf	12	Basal bark Cut stump leave Manual pulling	Same as initial treatment	Triclopyr	11	Agriculture / Disturbed Land / Developed Area (including roads) Mangrove	Wood stork Cultural resources Visitor use areas and roads	Passive
11	NA	Melaleuca Australian pine Brazilian pepper	31,368	Cut/stump leave Basal bark Manual pulling Biological control	Same as initial treatment	Imazapyr Glyphosate Triclopyr	4,392–28,545	Agriculture / Disturbed Land / Developed Area (including roads) Grassland / Coastal Strand Sawgrass Marsh / Wet Prairie / Freshwater Marsh Shrubland Upland Dry / Mesic Forest Wetland Forest	Wood stork E. indigo snake Cape sable seaside sparrow Florida panther Cultural resources Visitor use areas and roads	Passive



**TABLE E-2: EVERGLADES NATIONAL PARK  
ALTERNATIVE SUMMARY TABLE OF TREATMENT AREAS WITHIN THE PARK (CONTINUED)**

Treatment Area ID	Priority for Treatment	Exotic Species	Gross Infested (acres) <sup>a</sup>	Initial Treatment Methods <sup>b</sup>	Re-treatment Method <sup>c</sup>	Herbicides <sup>d</sup>	Total Initial Herbicide Applied to Treatment Area (undiluted gal.) <sup>e</sup>	Vegetation Category	Sensitive Resources	Restoration <sup>f</sup>
12	NA	Melaleuca	21,226	Cut/stump leave Manual pulling Biological control	Same as initial treatment	Imazapyr Glyphosate	2,972– 4,245	Agriculture / Disturbed Land / Developed Area (including roads) Sawgrass Marsh / Wet Prairie / Freshwater Marsh Upland Dry / Mesic Forest Wetland Forest	Wood stork E. indigo snake Cape sable seaside sparrow Everglades snail kite Florida panther Cultural resources Visitor use areas and roads	Passive
13	NA	Brazilian pepper	400	Basal bark Manual pulling	Same as initial treatment	Triclopyr	364	Agriculture / Disturbed Land / Developed Area (including roads) Mangrove Coastal Marsh Wetland Forest	Wood stork Visitor use areas and roads	Passive
14	NA	Brazilian pepper Lygodium	54,574	Foliar air Foliar ground Fire Mechanical removal Basal bark Manual pulling Biological control	Same as initial treatment	Metsulfuron methyl Triclopyr	2,729– 49,662	Agriculture / Disturbed Land / Developed Area (including roads) Grassland / Coastal Strand Mangrove Coastal Marsh Sawgrass Marsh / Wet Prairie / Freshwater Marsh Upland Dry / Mesic Forest Wetland Forest	Wood stork American crocodile E. indigo snake Bald eagle Florida panther Cultural resources	Passive
15	NA	Brazilian pepper	1,201	Basal bark Manual pulling	Same as initial treatment	Triclopyr	1,093	Mangrove Coastal Marsh	Wood stork American crocodile	Passive





**TABLE E-2: EVERGLADES NATIONAL PARK  
ALTERNATIVE SUMMARY TABLE OF TREATMENT AREAS WITHIN THE PARK (CONTINUED)**

Treatment Area ID	Priority for Treatment	Exotic Species	Gross Infested (acres) <sup>a</sup>	Initial Treatment Methods <sup>b</sup>	Re-treatment Method <sup>c</sup>	Herbicides <sup>d</sup>	Total Initial Herbicide Applied to Treatment Area (undiluted gal.) <sup>e</sup>	Vegetation Category	Sensitive Resources	Restoration <sup>f</sup>
16	NA	Brazilian pepper	1,131	Basal bark Manual pulling	Same as initial treatment	Triclopyr	1,029	Agriculture / Disturbed Land / Developed Area (including roads) Mangrove Coastal Marsh	Wood stork American crocodile E. indigo snake Cultural resources Visitor use areas and roads	Passive
17	NA	Brazilian pepper	4,139	Basal bark Manual pulling	Same as initial treatment	Triclopyr	3,766	Mangrove Coastal Marsh Sawgrass Marsh / Wet Prairie / Freshwater Marsh Upland Dry / Mesic Forest Wetland Forest	Wood stork American crocodile E. indigo snake Cultural resources	Passive
18	NA	Melaleuca	194	Cut surface application Manual pulling Biological control	Same as initial treatment	Imazapyr Glyphosate	27–39	Sawgrass Marsh / Wet Prairie / Freshwater Marsh Upland Dry / Mesic Forest Wetland Forest	Wood stork E. indigo snake Cape sable seaside sparrow Visitor use areas and roads	Passive
19	NA	Brazilian pepper	412	Basal bark Manual pulling	Same as initial treatment	Triclopyr	375	Grassland / Coastal Strand Mangrove Coastal Marsh Upland Dry / Mesic Forest	Wood stork American crocodile E. indigo snake Cultural resources	Passive

**TABLE E-2: EVERGLADES NATIONAL PARK  
ALTERNATIVE SUMMARY TABLE OF TREATMENT AREAS WITHIN THE PARK (CONTINUED)**

Treatment Area ID	Priority for Treatment	Exotic Species	Gross Infested (acres) <sup>a</sup>	Initial Treatment Methods <sup>b</sup>	Re-treatment Method <sup>c</sup>	Herbicides <sup>d</sup>	Total Initial Herbicide Applied to Treatment Area (undiluted gal.) <sup>e</sup>	Vegetation Category	Sensitive Resources	Restoration <sup>f</sup>
20	NA	Melaleuca Brazilian pepper	1,556	Cut surface application Basal bark Manual pulling Biological control	Same as initial treatment	Imazapyr Glyphosate Triclopyr	218–1,416	Agriculture / Disturbed Land / Developed Area (including roads) Sawgrass Marsh / Wet Prairie / Freshwater Marsh Upland Dry / Mesic Forest Wetland Forest	Wood stork American crocodile E. indigo snake Cape sable seaside sparrow Florida panther Cultural resources	Passive
21	NA	Melaleuca Brazilian pepper	790	Cut surface application Basal bark Manual pulling Biological control	Same as initial treatment	Imazapyr Glyphosate Triclopyr	111–719	Agriculture / Disturbed Land / Developed Area (including roads) Sawgrass Marsh / Wet Prairie / Freshwater Marsh Upland Dry / Mesic Forest Wetland Forest	Wood stork E. indigo snake Florida panther Cultural resources Visitor use areas, trails	Passive
22	NA	Melaleuca Brazilian pepper	379	Cut surface application Basal bark Manual pulling Biological control	Same as initial treatment	Imazapyr Glyphosate Triclopyr	53–345	Sawgrass Marsh / Wet Prairie / Freshwater Marsh Upland Dry / Mesic Forest Wetland Forest	Wood stork	Passive
23	NA	Australian pine	1,161	Basal bark Manual pulling	Same as initial treatment	Triclopyr	1,057	Agriculture / Disturbed Land / Developed Area (including roads) Mangrove Coastal Marsh Sawgrass Marsh / Wet Prairie / Freshwater Marsh Wetland Forest	Wood stork American crocodile E. indigo snake Visitor use areas and roads	Passive





**TABLE E-2: EVERGLADES NATIONAL PARK  
ALTERNATIVE SUMMARY TABLE OF TREATMENT AREAS WITHIN THE PARK (CONTINUED)**

Treatment Area ID	Priority for Treatment	Exotic Species	Gross Infested (acres) <sup>a</sup>	Initial Treatment Methods <sup>b</sup>	Re-treatment Method <sup>c</sup>	Herbicides <sup>d</sup>	Total Initial Herbicide Applied to Treatment Area (undiluted gal.) <sup>e</sup>	Vegetation Category	Sensitive Resources	Restoration <sup>f</sup>
<b>Alternative B</b>										
1	3	Lygodium Brazilian pepper	17,792	Foliar aerial Foliar ground leave Foliar ground remove Cut surface leave Cut surface remove Manual pulling Basal bark leave Biological control Manual pulling	Foliar ground leave Fire Manual pulling Biological control	Metsulfuron methyl Imazapyr Glyphosate Triclopyr	890–16,191	Mangrove Coastal Marsh	Wood stork American crocodile E. indigo snake Cultural resources	Passive
2	3	Brazilian pepper Lather leaf Lead tree	182	Foliar aerial Foliar ground leave Foliar ground remove Cut surface leave Cut surface remove Basal bark leave Manual pulling	Foliar ground leave Fire Manual pulling	Imazapyr Glyphosate Triclopyr	25–166	Grassland / Coastal Strand Mangrove Coastal Marsh	Wood stork American crocodile E indigo snake Cultural resources	Passive
3	3	Australian pine	133	Cut surface leave Cut surface remove Basal bark leave Manual pulling	Foliar ground leave Fire Manual pulling	Triclopyr	121	Mangrove Coastal Marsh	American crocodile	Passive

**TABLE E-2: EVERGLADES NATIONAL PARK  
ALTERNATIVE SUMMARY TABLE OF TREATMENT AREAS WITHIN THE PARK (CONTINUED)**

Treatment Area ID	Priority for Treatment	Exotic Species	Gross Infested (acres) <sup>a</sup>	Initial Treatment Methods <sup>b</sup>	Re-treatment Method <sup>c</sup>	Herbicides <sup>d</sup>	Total Initial Herbicide Applied to Treatment Area (undiluted gal.) <sup>e</sup>	Vegetation Category	Sensitive Resources	Restoration <sup>f</sup>
4 <sup>g</sup>	NA	Brazilian pepper	3,306	Foliar aerial Foliar ground leave Foliar ground remove Cut surface leave Cut surface remove Basal bark leave Manual pulling	—	—	0	Agriculture / Disturbed Land / Developed Area (including roads) Grassland / Coastal Strand Coastal Marsh Upland Dry / Mesic Forest Wetland Forest	Wood stork E. indigo snake Cape sable seaside sparrow Florida panther Cultural resources Visitor use areas	Active Passive
5	3	Melaleuca Australian pine Brazilian pepper	22,317	Foliar aerial Foliar ground leave Foliar ground remove Cut surface leave Cut surface Basal bark leave Biological control Manual pulling	Foliar ground leave Fire Manual pulling Biological control	Imazapyr Glyphosate Triclopyr	3,124–20,308	Agriculture / Disturbed Land / Developed Area (including roads) Sawgrass Marsh / Wet Prairie / Freshwater Marsh Upland Dry / Mesic Forest Wetland Forest	Wood stork E. indigo snake Everglades snail kite Florida panther	Passive
6	3	Brazilian pepper Lather leaf Seaside mahoe Scaevola	79	Foliar aerial Foliar ground leave Foliar ground remove Cut surface leave Cut surface remove Basal bark leave Manual pulling	Foliar ground leave Manual pulling	Imazapyr Glyphosate Triclopyr	11–72	Mangrove Beach / Dune	Wood stork E. indigo snake Cultural resources	Passive



**TABLE E-2: EVERGLADES NATIONAL PARK  
ALTERNATIVE SUMMARY TABLE OF TREATMENT AREAS WITHIN THE PARK (CONTINUED)**

Treatment Area ID	Priority for Treatment	Exotic Species	Gross Infested (acres) <sup>a</sup>	Initial Treatment Methods <sup>b</sup>	Re-treatment Method <sup>c</sup>	Herbicides <sup>d</sup>	Total Initial Herbicide Applied to Treatment Area (undiluted gal.) <sup>e</sup>	Vegetation Category	Sensitive Resources	Restoration <sup>f</sup>
7	3	Melaleuca Australian pine Brazilian pepper	12,914	Foliar aerial Foliar ground leave Foliar ground remove Cut surface leave Cut surface remove Basal bark leave Biological control Manual pulling	Foliar ground leave Fire Manual pulling Biological control	Imazapyr Glyphosate Triclopyr	1,707–11,097	Agriculture / Disturbed Land / Developed Area (including roads) Sawgrass Marsh / Wet Prairie / Freshwater Marsh Upland Dry / Mesic Forest Wetland Forest	Wood stork E. indigo snake Cape sable seaside sparrow	Passive
8	3	Melaleuca	2,193	Foliar aerial Foliar ground leave Foliar ground remove Cut surface leave Cut surface remove Basal bark leave Biological control Manual pulling	Foliar ground leave Fire Biological control Manual pulling	Imazapyr Glyphosate Triclopyr	300–1,996	Sawgrass Marsh / Wet Prairie / Freshwater Marsh Wetland Forest	Wood stork E. indigo snake Everglades snail kite	Passive
9	3	Australian pine Brazilian pepper Lather leaf Seaside mahoe	146	Cut surface leave Cut surface remove Basal bark leave Manual pulling	Foliar ground leave Fire Manual pulling	Imazapyr Glyphosate Triclopyr	20–133	Mangrove Coastal Marsh	Wood stork American crocodile E. indigo snake Cultural resources	Passive



**TABLE E-2: EVERGLADES NATIONAL PARK  
ALTERNATIVE SUMMARY TABLE OF TREATMENT AREAS WITHIN THE PARK (CONTINUED)**

Treatment Area ID	Priority for Treatment	Exotic Species	Gross Infested (acres) <sup>a</sup>	Initial Treatment Methods <sup>b</sup>	Re-treatment Method <sup>c</sup>	Herbicides <sup>d</sup>	Total Initial Herbicide Applied to Treatment Area (undiluted gal.) <sup>e</sup>	Vegetation Category	Sensitive Resources	Restoration <sup>f</sup>
10	1	Brazilian pepper Seaside mahoe Lather leaf	12	Foliar ground leave Foliar ground remove Cut surface leave Cut surface remove Basal bark leave Manual pulling	Foliar ground leave Manual pulling	Imazapyr Glyphosate Triclopyr	2–11	Agriculture / Disturbed Land / Developed Area (including roads) Mangrove	Wood stork Cultural resources Visitor use areas and roads	Passive
11	1	Melaleuca Australian pine Brazilian pepper	31,368	Foliar aerial Foliar ground leave Foliar ground remove Cut surface leave Cut surface remove Basal bark leave Biological control Manual pulling	Foliar ground leave Fire Manual pulling Biological control	Imazapyr Glyphosate Triclopyr	4,392–28,545	Agriculture / Disturbed Land / Developed Area (including roads) Grassland / Coastal Strand Sawgrass Marsh / Wet Prairie / Freshwater Marsh Shrubland/coastal strands Upland Dry / Mesic Forest Wetland Forest	Wood stork E. indigo snake Cape sable seaside sparrow Florida panther Cultural resources Visitor use areas and roads	Passive
12	1	Melaleuca Brazilian pepper	21,226	Foliar aerial Foliar ground leave Foliar ground remove Cut surface leave Cut surface remove Basal bark leave Biological control Manual pulling	Foliar ground leave Fire Manual pulling Biological control	Imazapyr Glyphosate Triclopyr	2,972–19,316	Agriculture / Disturbed Land / Developed Area (including roads) Sawgrass Marsh / Wet Prairie / Freshwater Marsh Upland Dry / Mesic Forest Wetland Forest	Wood stork E. indigo snake Cape sable seaside sparrow Everglades snail kite Florida panther Cultural resources Visitor use areas and roads	Passive



**TABLE E-2: EVERGLADES NATIONAL PARK  
ALTERNATIVE SUMMARY TABLE OF TREATMENT AREAS WITHIN THE PARK (CONTINUED)**

Treatment Area ID	Priority for Treatment	Exotic Species	Gross Infested (acres) <sup>a</sup>	Initial Treatment Methods <sup>b</sup>	Re-treatment Method <sup>c</sup>	Herbicides <sup>d</sup>	Total Initial Herbicide Applied to Treatment Area (undiluted gal.) <sup>e</sup>	Vegetation Category	Sensitive Resources	Restoration <sup>f</sup>
13	1	Brazilian pepper	400	Foliar aerial Foliar ground leave Foliar ground remove Cut surface leave Cut surface remove Basal bark leave Manual pulling	Foliar ground leave Fire Manual pulling	Imazapyr Glyphosate Triclopyr	56–364	Agriculture / Disturbed Land / Developed Area (including roads) Mangrove Coastal Marsh Wetland Forest	Wood stork Visitor use areas and roads	Passive
14	3	Brazilian pepper Lygodium	54,574	Foliar aerial Foliar ground leave Foliar ground remove Cut surface leave Cut surface remove Basal bark leave Biological control Manual pulling	Foliar ground leave Fire Manual pulling Biological control	Metsulfuron methyl Imazapyr Glyphosate Triclopyr	2,729–49,662	Agriculture / Disturbed Land / Developed Area (including roads) Grassland / Coastal Strand Mangrove Coastal Marsh Sawgrass Marsh / Wet Prairie / Freshwater Marsh Upland Dry / Mesic Forest Wetland Forest	Wood stork American crocodile E. indigo snake Bald eagle Florida panther Cultural resources	Passive
15	3	Brazilian pepper	1,201	Foliar aerial Foliar ground leave Foliar ground remove Cut surface leave Cut surface remove Basal bark leave Manual pulling	Foliar ground leave Fire Manual pulling	Imazapyr Glyphosate Triclopyr	168–1,093	Mangrove Coastal Marsh	Wood stork American crocodile	Passive

**TABLE E-2: EVERGLADES NATIONAL PARK  
ALTERNATIVE SUMMARY TABLE OF TREATMENT AREAS WITHIN THE PARK (CONTINUED)**

Treatment Area ID	Priority for Treatment	Exotic Species	Gross Infested (acres) <sup>a</sup>	Initial Treatment Methods <sup>b</sup>	Re-treatment Method <sup>c</sup>	Herbicides <sup>d</sup>	Total Initial Herbicide Applied to Treatment Area (undiluted gal.) <sup>e</sup>	Vegetation Category	Sensitive Resources	Restoration <sup>f</sup>
16	1	Brazilian pepper	1,131	Foliar aerial Foliar ground leave Foliar ground remove Cut surface leave Cut surface remove Basal bark leave Manual pulling	Foliar ground leave Fire Manual pulling	Imazapyr Glyphosate Triclopyr	158–1,029	Agriculture / Disturbed Land / Developed Area (including roads) Mangrove Coastal Marsh	Wood stork American crocodile E. indigo snake Cultural resources Visitor use areas and roads	Passive
17	3	Brazilian pepper	4,139	Foliar aerial Foliar ground leave Foliar ground remove Cut surface leave Cut surface remove Basal bark leave Manual pulling	Foliar ground leave Fire Manual pulling	Imazapyr Glyphosate Triclopyr	579–3,766	Mangrove Coastal Marsh Sawgrass Marsh / Wet Prairie / Freshwater Marsh Upland Dry / Mesic Forest Wetland Forest	Wood stork American crocodile E. indigo snake Cultural resources	Passive
18	1	Melaleuca	194	Foliar ground remove Biological control Cut surface remove Manual pulling	Foliar ground leave Fire Manual pulling Biological control	Imazapyr Glyphosate Triclopyr	27–177	Sawgrass Marsh / Wet Prairie / Freshwater Marsh Upland Dry / Mesic Forest Wetland Forest	Wood stork E. indigo snake Cape sable seaside sparrow Visitor use areas and roads	Passive





**TABLE E-2: EVERGLADES NATIONAL PARK  
ALTERNATIVE SUMMARY TABLE OF TREATMENT AREAS WITHIN THE PARK (CONTINUED)**

Treatment Area ID	Priority for Treatment	Exotic Species	Gross Infested (acres) <sup>a</sup>	Initial Treatment Methods <sup>b</sup>	Re-treatment Method <sup>c</sup>	Herbicides <sup>d</sup>	Total Initial Herbicide Applied to Treatment Area (undiluted gal.) <sup>e</sup>	Vegetation Category	Sensitive Resources	Restoration <sup>f</sup>
19	3	Brazilian pepper	412	Foliar aerial Foliar ground leave Foliar ground remove Cut surface leave Cut surface remove Basal bark leave Manual pulling	Foliar ground leave Fire Manual pulling	Imazapyr Glyphosate Triclopyr	58–375	Grassland / Coastal Strand Mangrove Coastal Marsh Upland Dry / Mesic Forest	Wood stork American crocodile E. indigo snake Cultural resources	Passive
20	3	Melaleuca Brazilian pepper	1,556	Foliar aerial Foliar ground leave Foliar ground remove Biological control Cut surface leave Cut surface remove Basal bark leave Manual pulling	Foliar ground leave Fire Manual pulling Biological control	Imazapyr Glyphosate Triclopyr	218–1,416	Agriculture / Disturbed Land / Developed Area (including roads) Sawgrass Marsh / Wet Prairie / Freshwater Marsh Upland Dry / Mesic Forest Wetland Forest	Wood stork American crocodile E. indigo snake Cape sable seaside sparrow Florida panther Cultural resources	Passive
21	2	Melaleuca Brazilian pepper	790	Foliar aerial Foliar ground leave Foliar ground remove Biological control Cut surface leave Cut surface remove Basal bark leave Manual pulling	Foliar ground leave Fire Manual pulling Biological control	Imazapyr Glyphosate Triclopyr	111–719	Agriculture / Disturbed Land / Developed Area (including roads) Sawgrass Marsh / Wet Prairie / Freshwater Marsh Upland Dry / Mesic Forest Wetland Forest	Wood stork E. indigo snake Florida panther Cultural resources Visitor use areas, trails	Passive

**TABLE E-2: EVERGLADES NATIONAL PARK  
ALTERNATIVE SUMMARY TABLE OF TREATMENT AREAS WITHIN THE PARK (CONTINUED)**

Treatment Area ID	Priority for Treatment	Exotic Species	Gross Infested (acres) <sup>a</sup>	Initial Treatment Methods <sup>b</sup>	Re-treatment Method <sup>c</sup>	Herbicides <sup>d</sup>	Total Initial Herbicide Applied to Treatment Area (undiluted gal.) <sup>e</sup>	Vegetation Category	Sensitive Resources	Restoration <sup>f</sup>
22	3	Melaleuca Brazilian pepper	379	Foliar ground leave Foliar ground remove Basal bark Cut surface leave Cut surface remove Basal bark leave Biological control Manual pulling	Foliar ground leave Biological control Fire Manual pulling	Imazapyr Glyphosate Triclopyr	53–345	Sawgrass Marsh / Wet Prairie / Freshwater Marsh Upland Dry / Mesic Forest Wetland Forest	Wood stork	Passive
23	1	Australian pine	1,161	Cut surface leave Cut surface remove Basal bark leave Manual pulling	Foliar ground leave Fire Manual pulling	Triclopyr	1,057	Agriculture / Disturbed Land / Developed Area (including roads) Mangrove Coastal Marsh Sawgrass Marsh / Wet Prairie / Freshwater Marsh Wetland Forest	Wood stork American crocodile E. indigo snake Visitor use areas and roads	Passive



**TABLE E-2: EVERGLADES NATIONAL PARK  
ALTERNATIVE SUMMARY TABLE OF TREATMENT AREAS WITHIN THE PARK (CONTINUED)**

Treatment Area ID	Priority for Treatment	Exotic Species	Gross Infested (acres) <sup>a</sup>	Initial Treatment Methods <sup>b</sup>	Re-treatment Method <sup>c</sup>	Herbicides <sup>d</sup>	Total Initial Herbicide Applied to Treatment Area (undiluted gal.) <sup>e</sup>	Vegetation Category	Sensitive Resources	Restoration <sup>f</sup>
<b>Alternative C</b>										
1	3	Lygodium Brazilian pepper	17,792	Foliar aerial Foliar ground leave Foliar ground remove Cut surface leave Cut surface remove Manual pulling Basal bark leave Biological control Manual pulling	Foliar ground leave Fire Manual pulling Biological control	Metsulfuron methyl Imazapyr Glyphosate Triclopyr	890–16,191	Mangrove Coastal Marsh	Wood stork American crocodile E. indigo snake Cultural resources	Passive
2	3	Brazilian pepper Lather leaf Lead tree	182	Foliar aerial Foliar ground leave Foliar ground remove Cut surface leave Cut surface remove Basal bark leave Manual pulling	Foliar ground leave Fire Manual pulling	Imazapyr Glyphosate Triclopyr	25–166	Grassland / Coastal Strand Mangrove Coastal Marsh	Wood stork American crocodile E indigo snake Cultural resources	Passive
3	3	Australian pine	133	Cut surface leave Cut surface remove Basal bark leave Manual pulling	Foliar ground leave Fire Manual pulling	Triclopyr	121	Mangrove Coastal Marsh	American crocodile	Passive

**TABLE E-2: EVERGLADES NATIONAL PARK  
ALTERNATIVE SUMMARY TABLE OF TREATMENT AREAS WITHIN THE PARK (CONTINUED)**

Treatment Area ID	Priority for Treatment	Exotic Species	Gross Infested (acres) <sup>a</sup>	Initial Treatment Methods <sup>b</sup>	Re-treatment Method <sup>c</sup>	Herbicides <sup>d</sup>	Total Initial Herbicide Applied to Treatment Area (undiluted gal.) <sup>e</sup>	Vegetation Category	Sensitive Resources	Restoration <sup>f</sup>
4 <sup>g</sup>	NA	Brazilian pepper	3,306	Foliar aerial Foliar ground leave Foliar ground remove Cut surface leave Cut surface remove Basal bark leave Manual pulling	—	—	0	Agriculture / Disturbed Land / Developed Area (including roads) Grassland / Coastal Strand Sawgrass Marsh / Wet Prairie / Freshwater Marsh Upland Dry / Mesic Forest Wetland Forest	Wood stork E. indigo snake Cape sable seaside sparrow Florida panther Cultural resources Visitor use areas	Active Passive
5	3	Melaleuca Australian pine Brazilian pepper	22,317	Foliar aerial Foliar ground leave Foliar ground remove Cut surface leave Cut surface Basal bark leave Biological control Manual pulling	Foliar ground leave Fire Manual pulling Biological control	Imazapyr Glyphosate Triclopyr	3,124–20,308	Agriculture / Disturbed Land / Developed Area (including roads) Sawgrass Marsh / Wet Prairie / Freshwater Marsh Upland Dry / Mesic Forest Wetland Forest	Wood stork E. indigo snake Everglades snail kite Florida panther	Active Passive
6	3	Brazilian pepper Lather leaf Seaside mahoe Scaevola	79	Foliar aerial Foliar ground leave Foliar ground remove Cut surface leave Cut surface remove Basal bark leave Manual pulling	Foliar ground leave Manual pulling	Imazapyr Glyphosate Triclopyr	11 - 72	Mangrove Sand/beach	Wood stork E. indigo snake Cultural resources	Passive



**TABLE E-2: EVERGLADES NATIONAL PARK  
ALTERNATIVE SUMMARY TABLE OF TREATMENT AREAS WITHIN THE PARK (CONTINUED)**

Treatment Area ID	Priority for Treatment	Exotic Species	Gross Infested (acres) <sup>a</sup>	Initial Treatment Methods <sup>b</sup>	Re-treatment Method <sup>c</sup>	Herbicides <sup>d</sup>	Total Initial Herbicide Applied to Treatment Area (undiluted gal.) <sup>e</sup>	Vegetation Category	Sensitive Resources	Restoration <sup>f</sup>
7	3	Melaleuca Australian pine Brazilian pepper	12,914	Foliar aerial Foliar ground leave Foliar ground remove Cut surface leave Cut surface remove Basal bark leave Biological control Manual pulling	Foliar ground leave Fire Manual pulling Biological control	Imazapyr Glyphosate Triclopyr	1,707–11,097	Agriculture / Disturbed Land / Developed Area (including roads) Sawgrass Marsh / Wet Prairie / Freshwater Marsh Upland Dry / Mesic Forest Wetland Forest	Wood stork E. indigo snake Cape sable seaside sparrow	Active Passive
8	3	Melaleuca	2,193	Foliar aerial Foliar ground leave Foliar ground remove Cut surface leave Cut surface remove Basal bark leave Biological control Manual pulling	Foliar ground leave Fire Biological control Manual pulling	Imazapyr Glyphosate Triclopyr	300–1,996	Sawgrass Marsh / Wet Prairie / Freshwater Marsh Wetland Forest	Wood stork E. indigo snake Everglades snail kite	Passive
9	3	Australian pine Brazilian pepper Lather leaf Seaside mahoe	146	Cut surface leave Cut surface remove Basal bark leave Manual pulling	Foliar ground leave Fire Manual pulling	Imazapyr Glyphosate Triclopyr	20–133	Mangrove Coastal Marsh	Wood stork American crocodile E. indigo snake Cultural resources	Passive



**TABLE E-2: EVERGLADES NATIONAL PARK  
ALTERNATIVE SUMMARY TABLE OF TREATMENT AREAS WITHIN THE PARK (CONTINUED)**

Treatment Area ID	Priority for Treatment	Exotic Species	Gross Infested (acres) <sup>a</sup>	Initial Treatment Methods <sup>b</sup>	Re-treatment Method <sup>c</sup>	Herbicides <sup>d</sup>	Total Initial Herbicide Applied to Treatment Area (undiluted gal.) <sup>e</sup>	Vegetation Category	Sensitive Resources	Restoration <sup>f</sup>
10	1	Brazilian pepper Seaside mahoe Lather leaf	12	Foliar ground leave Foliar ground remove Cut surface leave Cut surface remove Basal bark leave Manual pulling	Foliar ground leave Manual pulling	Imazapyr Glyphosate Triclopyr	2–11	Agriculture / Disturbed Land / Developed Area (including roads) Mangrove	Wood stork Cultural resources Visitor use areas and roads	Passive
11	1	Melaleuca Australian pine Brazilian pepper	31,368	Foliar aerial Foliar ground leave Foliar ground remove Cut surface leave Cut surface remove Basal bark leave Biological control Manual pulling	Foliar ground leave Fire Manual pulling Biological control	Imazapyr Glyphosate Triclopyr	4,392–28,545	Agriculture / Disturbed Land / Developed Area (including roads) Grassland / Coastal Strand Sawgrass Marsh / Wet Prairie / Freshwater Marsh Shrubland Upland Dry / Mesic Forest Wetland Forest	Wood stork E. indigo snake Cape sable seaside sparrow Florida panther Cultural resources Visitor use areas and roads	Active Passive
12	1	Melaleuca Brazilian pepper	21,226	Foliar aerial Foliar ground leave Foliar ground remove Cut surface leave Cut surface remove Basal bark leave Biological control Manual pulling	Foliar ground leave Fire Manual pulling Biological control	Imazapyr Glyphosate Triclopyr	2,972–19,316	Agriculture / Disturbed Land / Developed Area (including roads) Sawgrass Marsh / Wet Prairie / Freshwater Marsh Upland Dry / Mesic Forest Wetland Forest	Wood stork E. indigo snake Cape sable seaside sparrow Everglades snail kite Florida panther Cultural resources Visitor use areas and roads	Active Passive



**TABLE E-2: EVERGLADES NATIONAL PARK  
ALTERNATIVE SUMMARY TABLE OF TREATMENT AREAS WITHIN THE PARK (CONTINUED)**

Treatment Area ID	Priority for Treatment	Exotic Species	Gross Infested (acres) <sup>a</sup>	Initial Treatment Methods <sup>b</sup>	Re-treatment Method <sup>c</sup>	Herbicides <sup>d</sup>	Total Initial Herbicide Applied to Treatment Area (undiluted gal.) <sup>e</sup>	Vegetation Category	Sensitive Resources	Restoration <sup>f</sup>
13	1	Brazilian pepper	400	Foliar aerial Foliar ground leave Foliar ground remove Cut surface leave Cut surface remove Basal bark leave Manual pulling	Foliar ground leave Fire Manual pulling	Imazapyr Glyphosate Triclopyr	56–364	Agriculture / Disturbed Land / Developed Area (including roads) Mangrove Coastal Marsh Wetland Forest	Wood stork Visitor use areas and roads	Active Passive
14	3	Brazilian pepper Lygodium	54,574	Foliar aerial Foliar ground leave Foliar ground remove Cut surface leave Cut surface remove Basal bark leave Biological control Manual pulling	Foliar ground leave Fire Manual pulling Biological control	Metsulfuron methyl Imazapyr Glyphosate Triclopyr	2,729–49,662	Agriculture / Disturbed Land / Developed Area (including roads) Grassland / Coastal Strand Mangrove Coastal Marsh Sawgrass Marsh / Wet Prairie / Freshwater Marsh Upland Dry / Mesic Forest Wetland Forest	Wood stork American crocodile E. indigo snake Bald eagle Florida panther Cultural resources	Active Passive
15	3	Brazilian pepper	1,201	Foliar aerial Foliar ground leave Foliar ground remove Cut surface leave Cut surface remove Basal bark leave Manual pulling	Foliar ground leave Fire Manual pulling	Imazapyr Glyphosate Triclopyr	168–1,093	Mangrove Coastal Marsh	Wood stork American crocodile	Passive

**TABLE E-2: EVERGLADES NATIONAL PARK  
ALTERNATIVE SUMMARY TABLE OF TREATMENT AREAS WITHIN THE PARK (CONTINUED)**

Treatment Area ID	Priority for Treatment	Exotic Species	Gross Infested (acres) <sup>a</sup>	Initial Treatment Methods <sup>b</sup>	Re-treatment Method <sup>c</sup>	Herbicides <sup>d</sup>	Total Initial Herbicide Applied to Treatment Area (undiluted gal.) <sup>e</sup>	Vegetation Category	Sensitive Resources	Restoration <sup>f</sup>
16	1	Brazilian pepper	1,131	Foliar aerial Foliar ground leave Foliar ground remove Cut surface leave Cut surface remove Basal bark leave Manual pulling	Foliar ground leave Fire Manual pulling	Imazapyr Glyphosate Triclopyr	158–1,029	Agriculture / Disturbed Land / Developed Area (including roads) Mangrove Coastal Marsh	Wood stork American crocodile E. indigo snake Cultural resources Visitor use areas and roads	Passive
17	3	Brazilian pepper	4,139	Foliar aerial Foliar ground leave Foliar ground remove Cut surface leave Cut surface remove Basal bark leave Manual pulling	Foliar ground leave Fire Manual pulling	Imazapyr Glyphosate Triclopyr	579–3,766	Mangrove Coastal Marsh Sawgrass Marsh / Wet Prairie / Freshwater Marsh Upland Dry / Mesic Forest Wetland Forest	Wood stork American crocodile E. indigo snake Cultural resources	Active Passive
18	1	Melaleuca	194	Foliar ground remove Biological control Cut surface remove Manual pulling	Foliar ground leave Fire Manual pulling Biological control	Imazapyr Glyphosate Triclopyr	27–177	Sawgrass Marsh / Wet Prairie / Freshwater Marsh Upland Dry / Mesic Forest Wetland Forest	Wood stork E. indigo snake Cape sable seaside sparrow Visitor use areas and roads	Active Passive



**TABLE E-2: EVERGLADES NATIONAL PARK  
ALTERNATIVE SUMMARY TABLE OF TREATMENT AREAS WITHIN THE PARK (CONTINUED)**

Treatment Area ID	Priority for Treatment	Exotic Species	Gross Infested (acres) <sup>a</sup>	Initial Treatment Methods <sup>b</sup>	Re-treatment Method <sup>c</sup>	Herbicides <sup>d</sup>	Total Initial Herbicide Applied to Treatment Area (undiluted gal.) <sup>e</sup>	Vegetation Category	Sensitive Resources	Restoration <sup>f</sup>
19	3	Brazilian pepper	412	Foliar aerial Foliar ground leave Foliar ground remove Cut surface leave Cut surface remove Basal bark leave Manual pulling	Foliar ground leave Fire Manual pulling	Imazapyr Glyphosate Triclopyr	58–375	Grassland / Coastal Strand Mangrove Coastal Marsh Upland Dry / Mesic Forest	Wood stork American crocodile E. indigo snake Cultural resources	Passive
20	3	Melaleuca Brazilian pepper	1,556	Foliar aerial Foliar ground leave Foliar ground remove Biological control Cut surface leave Cut surface remove Basal bark leave Manual pulling	Foliar ground leave Fire Manual pulling Biological control	Imazapyr Glyphosate Triclopyr	218 – 1,416	Agriculture / Disturbed Land / Developed Area (including roads) Sawgrass Marsh / Wet Prairie / Freshwater Marsh Upland Dry / Mesic Forest Wetland Forest	Wood stork American crocodile E. indigo snake Cape sable seaside sparrow Florida panther Cultural resources	Passive
21	2	Melaleuca Brazilian pepper	790	Foliar aerial Foliar ground leave Foliar ground remove Biological control Cut surface leave Cut surface remove Basal bark leave Manual pulling	Foliar ground leave Fire Manual pulling Biological control	Imazapyr Glyphosate Triclopyr	111–719	Agriculture / Disturbed Land / Developed Area (including roads) Sawgrass Marsh / Wet Prairie / Freshwater Marsh Upland Dry / Mesic Forest Wetland Forest	Wood stork E. indigo snake Florida panther Cultural resources Visitor use areas, trails	Passive

**TABLE E-2: EVERGLADES NATIONAL PARK  
ALTERNATIVE SUMMARY TABLE OF TREATMENT AREAS WITHIN THE PARK (CONTINUED)**

Treatment Area ID	Priority for Treatment	Exotic Species	Gross Infested (acres) <sup>a</sup>	Initial Treatment Methods <sup>b</sup>	Re-treatment Method <sup>c</sup>	Herbicides <sup>d</sup>	Total Initial Herbicide Applied to Treatment Area (undiluted gal.) <sup>e</sup>	Vegetation Category	Sensitive Resources	Restoration <sup>f</sup>
22	3	Melaleuca Brazilian pepper	379	Foliar ground leave Foliar ground remove Basal bark Cut surface leave Cut surface remove Basal bark leave Biological control Manual pulling	Foliar ground leave Biological control Fire Manual pulling	Imazapyr Glyphosate Triclopyr	53–345	Sawgrass Marsh / Wet Prairie / Freshwater Marsh Upland Dry / Mesic Forest Wetland Forest	Wood stork	Passive
23	1	Australian pine	1,161	Cut surface leave Cut surface remove Basal bark leave Manual pulling	Foliar ground leave Fire Manual pulling	Triclopyr	1,057	Agriculture / Disturbed Land / Developed Area (including roads) Mangrove Coastal Marsh Sawgrass Marsh / Wet Prairie / Freshwater Marsh Wetland Forest	Wood stork American crocodile E. indigo snake Visitor use areas and roads	Passive







**TABLE E-3: EVERGLADES NATIONAL PARK**  
**AMOUNT OF HERBICIDE TO BE APPLIED OVER TIME UNDER ALTERNATIVE A**

Vegetation Category	Total Acres to be Initially Treated	Potential Minimum Application of Herbicide for Initial Treatment <sup>a</sup> (gallons)	Potential Maximum Application of Herbicide for Initial Treatment <sup>b</sup> (gallons)	Potential Minimum Application of Herbicide Over Time <sup>c</sup>				Potential Maximum Application of Herbicide Over Time <sup>c</sup>			
				Initial Treatment (gallons/acre)	36 (months)	72 (months)	108 (months)	Initial Treatment (gallons/acre)	36 (months)	72 (months)	108 (months)
Agriculture / Disturbed Land / Developed Area (including roads)	2,075	104	1,888	104	94	84	74	1,888	1,718	1,529	1,341
Grassland / Coastal Strand	171	9	156	9	8	7	6	156	142	126	110
Mangrove	2,802	140	2,550	140	127	113	99	2,550	2,320	2,065	1,810
Coastal Marsh	2,004	100	1,824	100	91	81	71	1,824	1,660	1,477	1,295
Sawgrass Marsh / Wet Prairie / Freshwater Marsh	42,689	2,134	38,847	2,134	1,942	1,729	1,515	38,847	35,351	31,466	27,581
Shrubland	258	13	235	13	12	10	9	235	214	190	167
Upland Dry / Mesic Forest	14,189	709	12,912	709	646	575	504	12,912	11,750	10,459	9,168
Wetland Forest	91,257	4,563	83,044	4,563	4,152	3,696	3,240	83,044	75,570	67,266	58,961
<b>Total</b>	<b>155,445</b>	<b>7,772</b>	<b>141,455</b>	<b>7,772</b>	<b>7,073</b>	<b>6,296</b>	<b>5,518</b>	<b>141,455</b>	<b>128,724</b>	<b>114,579</b>	<b>100,433</b>

a. Potential minimum application of herbicide is calculated by taking the average minimum concentration of herbicide that could be applied (0.05 undiluted gallons/acre) multiplied by the acres to be treated. For a discussion on the average rate of herbicide application, see the "Environmental Consequences" Chapter, General Methodology, Treatment and Re-treatment of Exotic Plants section.

b. Potential maximum application of herbicide is calculated by taking the average maximum concentration of herbicide that could be applied (0.91 undiluted gallons/acre) multiplied by the acres to be treated.

c. It was assumed that re-treatment on average would occur every 3 years and that the number of stems treated would decline by a rate of approximately 11%. See the "Environmental Consequences" Chapter, General Methodology, Treatment and Re-treatment of Exotic Plants section.

**TABLE E-4: EVERGLADES NATIONAL PARK  
AMOUNT OF HERBICIDE TO BE APPLIED OVER TIME UNDER ALTERNATIVE B**

<b>Vegetation Category</b>	<b>Total Acres to be Initially Treated</b>	<b>Potential Minimum Application of Herbicide (gallons)<sup>a</sup></b>	<b>Potential Maximum Application of Herbicide (gallons)<sup>b</sup></b>
Agriculture / Disturbed Land / Developed Area (including roads)	2,075	104	1,888
Grassland/ Coastal Strand	171	9	156
Mangrove	2,802	140	2,550
Coastal Marsh	2,004	100	1,824
Sawgrass Marsh / Wet Prairie / Freshwater Marsh	42,689	2,134	38,847
Shrubland	258	13	235
Upland Dry / Mesic Forest	14,189	709	12,912
Wetland Forest	91,257	4,563	83,044
<b>Total</b>	<b>155,445</b>	<b>7,772</b>	<b>141,455</b>

a. Potential minimum application of herbicide is calculated by taking the average minimum concentration of herbicide that could be applied (0.05 undiluted gallons/acre) multiplied by the acres to be treated. For a discussion on the average rate of herbicide application, see the "Environmental Consequences" Chapter, General Methodology, Treatment and Re-treatment of Exotic Plants section.

b. Potential maximum application of herbicide is calculated by taking the average maximum concentration of herbicide that could be applied (0.91 undiluted gallons/acre) multiplied by the acres to be treated.

**TABLE E-5: EVERGLADES NATIONAL PARK**  
**AMOUNT OF HERBICIDE TO BE APPLIED OVER TIME UNDER ALTERNATIVE B<sup>a</sup>**

Vegetation Category	Initial Treatment	Potential Minimum Application of Herbicide (gallons/acre)											
		Number of Months											
		6	12	18	24	30	36	42	48	54	60	66	72
Agriculture / Disturbed Land / Developed Area (including roads)	104	52	26	13	6	3	2	1	<1	0	0	0	0
Grassland/ Coastal Strand	9	4	2	1	1	<1	0	0	0	0	0	0	0
Mangrove	140	70	35	18	9	4	2	1	1	<1	0	0	0
Coastal Marsh	100	50	25	13	6	3	2	1	<1	0	0	0	0
Sawgrass Marsh / Wet Prairie / Freshwater Marsh	2,134	1,067	534	267	133	67	33	17	8	4	2	1	1
Shrubland	13	6	3	2	1	<1	0	0	0	0	0	0	0
Upland Dry / Mesic Forest	709	355	177	89	44	22	11	6	3	1	1	<1	0
Wetland Forest	4,563	2,281	1,141	570	285	143	71	36	18	9	4	2	1
<b>Total</b>	<b>7,772</b>	<b>3,886</b>	<b>1,943</b>	<b>972</b>	<b>486</b>	<b>243</b>	<b>121</b>	<b>61</b>	<b>30</b>	<b>15</b>	<b>8</b>	<b>4</b>	<b>2</b>
Vegetation Category	Initial Treatment	Potential Maximum Application of Herbicide (gallons/acre)											
		Number of Months											
		6	12	18	24	30	36	42	48	54	60	66	72
Agriculture / Disturbed Land / Developed Area (including roads)	1,888	944	472	236	118	59	30	15	7	4	2	1	<1
Grassland/ Coastal Strand	156	78	39	19	10	5	2	1	1	<1	0	0	0
Mangrove	2,550	1,275	637	319	159	80	40	20	10	5	2	1	1
Coastal Marsh	1,824	912	456	228	114	57	28	14	7	4	2	1	<1
Sawgrass Marsh / Wet Prairie / Freshwater Marsh	38,847	19,423	9,712	4,856	2,428	1,214	607	303	152	76	38	19	9
Shrubland	235	117	59	29	15	7	4	2	1	<1	0	0	0
Upland Dry / Mesic Forest	12,912	6,456	3,228	1,614	807	403	202	101	50	25	13	6	3
Wetland Forest	83,044	41,522	20,761	10,380	5,190	2,595	1,298	649	324	162	81	41	20
<b>Total</b>	<b>141,455</b>	<b>70,727</b>	<b>35,364</b>	<b>17,682</b>	<b>8,841</b>	<b>4,420</b>	<b>2,210</b>	<b>1,105</b>	<b>553</b>	<b>276</b>	<b>138</b>	<b>69</b>	<b>35</b>

a. It was assumed that re-treatment on average every 6 months would result in 50% less the number of stems that would need to be treated and therefore only 50% of the prior herbicide use would be applied. See the "Environmental Consequences" Chapter, General Methodology, Treatment and Re-treatment of Exotic Plants section.

**TABLE E-6: EVERGLADES NATIONAL PARK  
POTENTIAL MINIMUM AMOUNT OF HERBICIDE TO BE APPLIED OVER TIME UNDER ALTERNATIVE C**

Vegetation Category	Potential minimum application of herbicide (gallons) for initial treatment	Potential minimum application of herbicide (gallons) for re-treatment <sup>a</sup>	Potential Minimum Application of Herbicide (gallons/acre) <sup>b</sup>											
			Number of Months											
			6	12	18	24	30	36	42	48	54	60	66	72
Agriculture / Disturbed Land / Developed Area (including roads)	104	—	—	—	—	—	—	—	—	—	—	—	—	—
Grassland/ Coastal Strand	9	5	2	1	1	<1	0	0	0	0	0	0	0	0
Mangrove	140	138	69	35	17	9	4	2	1	1	<1	0	0	0
Coastal Marsh	100	92	46	23	12	6	3	1	1	<1	0	0	0	0
Sawgrass Marsh / Wet Prairie / Freshwater Marsh	2,134	1,496	748	374	187	94	47	23	12	6	3	1	1	<1
Shrubland	13	13	6	3	2	1	<1	0	0	0	0	0	0	0
Upland Dry / Mesic Forest	709	649	325	162	81	41	20	10	5	3	1	1	<1	0
Wetland Forest	4,563	3,853	1,927	963	482	241	120	60	30	15	8	4	2	1
<b>Total</b>	<b>7,772</b>	<b>6,247</b>	<b>3,123</b>	<b>1,562</b>	<b>781</b>	<b>390</b>	<b>195</b>	<b>98</b>	<b>49</b>	<b>24</b>	<b>12</b>	<b>6</b>	<b>3</b>	<b>2</b>

a. It was assumed for the analysis that only those acres that would be allowed to passively restore would continue to be re-treated with herbicides.

b. It was assumed that re-treatment on average every 6 months would result in 50% less the number of stems that would need to be treated and therefore only 50% of the prior herbicide use would be applied. See the "Environmental Consequences" Chapter, General Methodology, Treatment and Re-treatment of Exotic Plants section.



**TABLE E-7: EVERGLADES NATIONAL PARK**  
**POTENTIAL MAXIMUM AMOUNT OF HERBICIDE TO BE APPLIED OVER TIME UNDER ALTERNATIVE C**

Vegetation Category	Potential maximum application of herbicide (gallons) for initial treatment	Potential maximum application of herbicide (gallons) for re-treatment <sup>a</sup>	Potential Maximum Application of Herbicide (gallons/acre) <sup>b</sup>											
			Number of Months											
			6	12	18	24	30	36	42	48	54	60	66	72
Agriculture / Disturbed Land / Developed Area (including roads)	4,366	—	—	—	—	—	—	—	—	—	—	—	—	—
Grassland / Coastal Strand	340	88	44	22	11	6	3	1	1	<1	0	0	0	0
Mangrove	5,740	2,515	1,258	629	314	157	79	39	20	10	5	2	1	1
Coastal Marsh	4,173	1,674	837	419	209	105	52	26	13	7	3	2	1	<1
Sawgrass Marsh / Wet Prairie / Freshwater Marsh	116,213	27,228	13,614	6,807	3,404	1,702	851	425	213	106	53	27	13	7
Shrubland	355	235	117	59	29	15	7	4	2	1	<1	0	0	0
Upland Dry / Mesic Forest	34,838	11,820	5,910	2,955	1,477	739	369	185	92	46	23	12	6	3
Wetland Forest	232,807	70,132	35,066	17,533	8,766	4,383	2,192	1,096	548	274	137	68	34	17
<b>Total</b>	<b>398,833</b>	<b>113,693</b>	<b>56,852</b>	<b>28,435</b>	<b>14,230</b>	<b>7,130</b>	<b>3,583</b>	<b>1,812</b>	<b>930</b>	<b>492</b>	<b>276</b>	<b>171</b>	<b>122</b>	<b>100</b>

a. It was assumed for the analysis that only those acres that would be allowed to passively restore would continue to be re-treated with herbicides.

b. It was assumed that re-treatment on average every 6 months would result in 50% less the number of stems that would need to be treated and therefore only 50% of the prior herbicide use would be applied. See the "Environmental Consequences" Chapter, General Methodology, Treatment and Re-treatment of Exotic Plants section.



**TABLE E-8: EVERGLADES NATIONAL PARK**  
**DISTRIBUTION OF APPROPRIATE TREATMENT METHODS BY VEGETATION CATEGORY UNDER ALTERNATIVE A**

Big Cypress National Preserve	Total Acres within Park	Total Potential Acres Infested within Park	Initial Treatment Methods <sup>a</sup>	Re-treatment Methods <sup>a</sup>
			Basal Bark, Cut / Stump, Frill / Hack / Notch, Foliar Ground and Leave, Aerial Spray, or Manual Pulling	Basal Bark, Cut/Stump, Frill / Hack / Notch, Foliar Ground and Leave, Aerial, Prescribed Burn, or Manual Pulling
Agriculture / Disturbed Land / Developed Area (including roads)	4,797	2,075	2,075	2,075
Grassland / Coastal Strand	943	171	171	171
Mangrove	8,038	2,802	2,802	2,802
Coastal Marsh	7,166	2,004	2,004	2,004
Sawgrass Marsh / Wet Prairie / Freshwater Marsh	249,844	42,689	42,689	42,689
Shrubland	390	258	258	258
Upland Dry / Mesic Forest	61,563	14,189	14,189	14,189
Wetland Forest	393,867	91,257	91,257	91,257
<b>Total</b>	<b>726,608</b>	<b>155,445</b>	<b>155,445</b>	<b>155,445</b>

a. It was assumed under Alternative A that re-treatment methods occur approximately every 3 years and would therefore be the same as initial treatment methods (see the “Alternatives” Chapter, Alternative B, Maintaining Treated Sites section).



**TABLE E-9: EVERGLADES NATIONAL PARK**  
**DISTRIBUTION OF APPROPRIATE TREATMENT METHODS BY VEGETATION CATEGORY UNDER ALTERNATIVE B**

Big Cypress National Preserve	Total acres within park	Total Potential Acres Infested within Park	Initial Treatment Methods <sup>a</sup>						Re-treatment Methods <sup>a</sup>	
			Basal Bark	Foliar			Cut Stump		Foliar Ground and Remove, or Leave; Manual Pulling	Prescribed Burn
			Leave in Place	Ground and Remove	Ground and Leave in Place	Aerial	Remove	Leave in Place		
Agriculture / Disturbed Land / Developed Area (including roads)	4,797	2,075	2,001	1,988	1,922	170	2,074	2,074	2,075	0
Grassland / Coastal Strand	943	171	171	170	170	170	171	171	171	171
Mangrove	8,038	2,802	2,802	2,519	2,519	2,519	2,802	2,802	2,802	0
Coastal Marsh	7,166	2,004	2,004	2,001	2,001	2,001	2,004	2,004	2,004	2,004
Sawgrass Marsh / Wet Prairie / Freshwater Marsh	249,844	42,689	41,066	42,243	40,698	42,243	42,527	42,527	42,689	0
Shrubland	390	258	258	258	258	0	258	258	258	258
Upland Dry / Mesic Forest	61,563	14,189	14,070	14,146	14,027	0	14,007	14,007	14,189	14,189
Wetland Forest	393,867	91,257	88,928	90,377	88,195	90,377	90,423	90,423	91,257	91,257
<b>Total</b>	<b>726,608</b>	<b>155,445</b>	<b>151,299</b>	<b>154,241</b>	<b>150,327</b>	<b>137,480</b>	<b>154,825</b>	<b>154,825</b>	<b>155,445</b>	<b>107,879</b>

a. The distribution of appropriate treatment methods was determined based on application of a new treatment method decision tool described in the "Alternatives" Chapter, Alternative B, Treatment Method Decision Tool section).

**TABLE E-10: EVERGLADES NATIONAL PARK DISTRIBUTION OF APPROPRIATE TREATMENT METHODS BY VEGETATION CATEGORY UNDER ALTERNATIVE C**

Big Cypress National Preserve	Total acres within park	Total Potential Acres Infested within Park	Initial Treatment Methods <sup>a</sup>						Re-treatment Methods <sup>b</sup>	
			Basal Bark	Foliar			Cut Stump		Foliar Ground and Remove or Leave; Manual Pulling	Prescribed Burn
			Leave in Place	Ground and Remove	Ground and Leave in Place	Aerial	Remove	Leave in Place		
Agriculture / Disturbed Land / Developed Area (including roads)	4,797	2,075	2,001	1,988	1,922	170	2,074	2,074	0	0
Grassland / Coastal Strand	943	171	171	170	170	170	171	171	97	97
Mangrove	8,038	2,802	2,802	2,519	2,519	2,519	2,802	2,802	2,764	0
Coastal Marsh	7,166	2,004	2,004	2,001	2,001	2,001	2,004	2,004	1,840	1,840
Sawgrass Marsh / Wet Prairie / Freshwater Marsh	249,844	42,689	41,066	42,243	40,698	42,243	42,527	42,527	29,921	0
Shrubland	390	258	258	258	258	0	258	258	258	258
Upland Dry / Mesic Forest	61,563	14,189	14,070	14,146	14,027	0	14,007	14,007	12,989	12,989
Wetland Forest	393,867	91,257	88,928	90,377	88,195	90,377	90,423	90,423	77,068	77,068
<b>Total</b>	<b>726,608</b>	<b>155,445</b>	<b>151,299</b>	<b>154,241</b>	<b>150,327</b>	<b>137,480</b>	<b>154,825</b>	<b>154,825</b>	<b>124,937</b>	<b>92,252</b>

a. The distribution of appropriate treatment methods was determined based on application of a new treatment method decision tool described in the “Alternatives” Chapter, Alternative B, Treatment Method Decision Tool section.

b. The acres to be re-treated are those that would be allowed to passively restore and are not subject to active restoration (see table E-1 for acres actively and passively restored).

