APPENDIX G

CHRISTIANSTED NATIONAL HISTORIC SITE

Appendix G: Christiansted National Historic Site

Maps

Tables

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.

Protestant Cay

Christiansted National Historic Site

GALLOWS BAY

Christiansted National Historic Site Boundary

CHRISTIANSTED

VEGETATION CATEGORIES

- Agriculture/Disturbed Land/ Developed Area (including roads)
- Open Water

910-20015	910
EPMP	September 2006

North

Protestant Cay

Christiansted National Historic Site

GALLOWS BAY

Christiansted National Historic Site Boundary

CHRISTIANSTED

TREATMENT AREA

Treatment Area #1

910-20014	910
EPMP	September 2006

North

APPENDIX G: CHRISTIANSTED NATIONAL HISTORIC SITE

TABLE G-1: ACRES WITHIN VEGETATION CATEGORIES THAT COULD POTENTIALLY BE RESTORED UNDER ALTERNATIVES A, B, AND C[a]

Vegetation Category	Alternative A[a]	Alternative B	Alternative C	
	Potential Acres Passively Restored	Potential Acres Passively Restored	Potential Acres Passively Restored	Potential Acres Actively Restored
Christiansted National Historic Site				
Agriculture / Disturbed Land / Developed Area (including roads)	<1	<1	<1	0
Total	**<1**	**<1**	**<1**	**0**

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 G-2 below

a. Under alternatives A, B, and C all treatment areas would be restored passively due to the small treatment areas (see the "Environmental Consequences" Chapter, Alternative C, Proposed Restoration Program).

b. Initial treatment methods for each area under alternatives A, B and C were based on data provided EPMT staff (see the "Alternatives" Chapter, Alternative A, Initial Treatment section and Alternative B, Treatment Method Decision Tool section). As all areas have been treated and are re-treated under an optimal treatment schedule the methods of initial treatment are assumed to be the same for all alternatives.

c. Re-treatment methods under alternatives A, B, and C were based on data provided by EPMT staff. As all areas have been treated and are re-treated under an optimal treatment schedule the methods of re-treatment are the same for all alternatives. (see the "Alternatives" Chapter, Alternative B, Maintaining Treated Sites section and Alternative B, Maintaining Treated Sites section).

d. Herbicides applied under alternatives A, B, and C are based on prior treatment data provided by EPMT staff.

e. The potential herbicide use under alternatives A, B, and C 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 glyphosate was 0.14 undiluted gallons and triclopyr was 0.91 undiluted gallons. To determine the range of potential herbicide use for treatment areas under alternative A, B, and C when no prior information existed, the average application rate was multiplied by the gross infested acres. See the "Environmental Consequences" Chapter, General Methodology, Treatment and Re-treatment of Exotic Plants section for further explanation.

f. Under alternatives A, B, and C all treatment areas would be restored passively due to the small treatment areas (see the "Environmental Consequences" Chapter, Alternative C, Proposed Restoration Program).

TABLE G-2: CHRISTIANSTED NATIONAL HISTORIC SITE
ALTERNATIVE SUMMARY TABLE OF TREATMENT AREAS WITHIN THE PARK

Treatment Area ID	Priority for Treatment	Exotic Species	Gross Infested (acres)[a]	Initial Treatment Methods[b]	Re-treatment Method[c]	Herbicides[d]	Total Initial Herbicide Applied to Treatment Area (undiluted gal.)[e]	Vegetation Category	Sensitive Resources	Restoration[f]
Alternatives A, B, and C										
1	NA	Tan tan Guinea grass	<1	Basal bark and leave Cut stump leave or remove Foliar ground leave or remove Manual pulling	Foliar ground and leave Hand pulling	Triclopyr Glyphosate	<1	Agriculture / Disturbed Land / Developed Area (including roads)	Cultural resources Visitor use areas	Passive

TABLE G-3: CHRISTIANSTED NATIONAL HISTORIC SITE
AMOUNT OF HERBICIDE TO BE APPLIED OVER TIME UNDER ALTERNATIVES A, B, AND C

Vegetation Category	Total Acres to be Initially Treated	Potential Minimum Application of Herbicide (gallons)[a]	Potential Maximum Application of Herbicide (gallons)[b]
Agriculture / Disturbed Land / Developed Area (including roads)	<1	<1	<1
Total	**<1**	**<1**	**<1**

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. See the "Environmental Consequences" Chapter, General Methodology, Treatment and Re-treatment of Exotic Plants section for a discussion on the average rate of herbicide application.

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 G-4: CHRISTIANSTED NATIONAL HISTORIC SITE
AMOUNT OF HERBICIDE TO BE APPLIED OVER TIME UNDER ALTERNATIVES A, B, AND C[a,b]

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 Lands / Developed Area (including roads)	<1	<1	0	0	0	0	0	0	0	0	0	0	0
Total	**<1**	**<1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
		Potential Maximum Application of Herbicide (gallons/acre)											
Agriculture / Disturbed Land / Developed Area (including roads)	**<1**	<1	0	0	0	0	0	0	0	0	0	0	0
Total	**<1**	**<1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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.

b. Note that Christiansted National Historic Site is currently under an optimal re-treatment schedule and therefore the amount of potential herbicide applied is same for these alternatives.

TABLE G-5: CHRISTIANSTED NATIONAL HISTORIC SITE
DISTRIBUTION OF APPROPRIATE TREATMENT METHODS
BY VEGETATION CATEGORY UNDER ALTERNATIVES A, B, AND C

Christiansted National Historic Site[a]	Total Acres within Park	Total Potential Acres Infested within Park	Initial Treatment Methods[a]	Re-treatment Methods[a]
			Basal Bark, Foliar Ground and Leave, Manual Pulling	Foliar Ground and Leave, Manual Pulling
Agriculture / Disturbed Land / Developed Area (including roads)	7	<1	<1	<1
Total	**7**	**<1**	**<1**	**<1**

a. All areas infested have been treated and are retreated under an optimal treatment schedule under alternatives A, B and C, therefore, it was assumed the methods used for initial treatment and re-treatment under all alternatives would be the same.