

# **Appendix 5-3: STA Herbicide Application Summary for Water Year 2007**

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## WATER YEAR 2007 SUMMARY OF HERBICIDE APPLICATION IN THE STORMWATER TREATMENT AREAS

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Floating vegetation in the Stormwater Treatment Areas (STAs) consists of water hyacinth (*Eichhornia crassipes*) and water lettuce (*Pistia stratiotes*) and is controlled using Reward®, a contact herbicide. Reward® is the product name, with diquat as the active ingredient. During Water Year 2007 (WY2007) (May 2006–April 2007), the acres of plants and the amount of Reward® (in gallons) that was applied in each STA are as follows:

STA	Acres	Reward® (gallons)
STA-1 West	705	155
STA-1 East	2,607	695
STA-2	522	92
STA-3/4	250	108
STA-5	1,547	859
STA-6	2	0.5

Emergent vegetation in the STAs consists of numerous species, such as cattail (*Typha* spp.), torpedograss (*Panicum repens*), paragrass (*Brachiaria mutica* or *Urochloa mutica*), primrose willow (*Ludwigia peruviana*), pigweed (*Amaranthus* sp.), water primrose (*Ludwigia peploides*) and other species. These plants are controlled using systematic herbicides including Habitat®, Renovate®, glyphosate, and 2,4-dichlorophenoxyacetic acid (2, 4-D). Habitat® is a product name, with imazapyr as the active ingredient. Renovate® is also a product name, with triclopyr as the active ingredient. Glyphosate and 2,4-D are active ingredients that are formulated in several different products. When areas of the STAs were dried out, a new chemical (product name Escort XP®) was applied to the STAs to treat willow primrose. During WY2007, the acres of emergent plants and the amounts of specific chemicals that were applied in each STA are as follows:

STA	Acres	Glyphosate (gallons)	Habitat® (gallons)	Renovate® (gallons)	Escort XP® (pounds)	2, 4-D (gallons)
STA-1 West	4,025	640	14	605.00	---	2,340
STA-1 East	1,494	1,432	130	31.00	---	---
STA-2	2,075	1,907	522		---	---
STA-3/4	2,405	1,874	237	8.25	50.00	---
STA-5	5,771	4,693	800	697.00	25.00	---
STA-6	320	1,518	384	124.00	18.75	---

A study to evaluate the effectiveness of a new growth-regulating herbicide containing the active ingredient imazamox was applied to 15 acres in STA-1E Cell 4S, after preliminary testing in the STA-1W indicated that imazamox could be used to regulate the growth of hydrilla (*Hydrilla* sp.) with little or no effect on southern naiad (*Najas guadalupensis*) or pondweed (*Chara* sp). The product name of this herbicide is Clearcast® and 13.68 gallons were used in this study.

During WY2007, the total acres and the amounts of specific herbicides that were applied (not including new herbicides) in the STAs are as follows:

STA	Acres	Herbicide Containing Glyphosate (gallons)	Herbicide Containing Imazapyr (gallons)	Herbicide Containing Triclopyr (gallons)	Herbicide Containing 2, 4-D (gallons)	Acres	Herbicide Containing Diquat (gallons)
STA-1 West	1,494	1,432	130	31	---	2,607	695
STA-1 East	4,205	640	14	605	2,340	705	155
STA-2	2,075	1,907	522	---	---	522	92
STA-3/4	2,005	1,874	237	8.25	---	250	108
STA-5	5,571	4,693	800	697	---	1,547	859
STA-6	170	1,518	384	124	---	2	0.5

The total acres and the amounts of new herbicides that were applied in the STAs in WY2007 are as follows:

STA	Acres	Herbicide Containing Imazomox (gallons)	Herbicide Containing Metsulfuron (pounds)
STA-1 East	15	13.68	
STA-3/4	400		50.00
STA-5	200		25.00
STA-6	150		18.75