San Diego River Photographic Tour of a Polluted Watershed – Santee Segment

Submitted to:
California Regional Water Quality Control Board
San Diego Region
9771 Clairmont Mesa Boulevard, Suite A
San Diego, CA 92124-1324

Atn: Keri Cole

303dlist@rb9.swrcb.ca.gov

May 10, 2001

By Van K. Collinsworth

Qualifications:

M. A. Geography emphasis, Humboldt State University

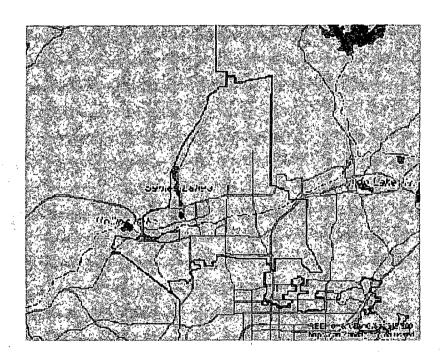
B.A. Geography, Humboldt State University

Undergraduate courses in Natural Resource Planning include: Watershed Management, Ecosystems Analysis,

Biology, Botany, Zoology, Physical Geography.

Work experience: Forestry Technician, USDA-Forest Service, seven seasons. Resource Analyst,

Preserve Wild Santee, seven years.



San Diego River Photographic Tour of a Polluted Watershed – Santee Segment Photography by Van K. Collinsworth & Tom Abshire

Conclusion:

The San Diego River, and its tributaries within Santee (Sycamore Creek and Forrester Creek) are impaired water bodies that should be added to the "303(d) list" under the Clean Water Act.

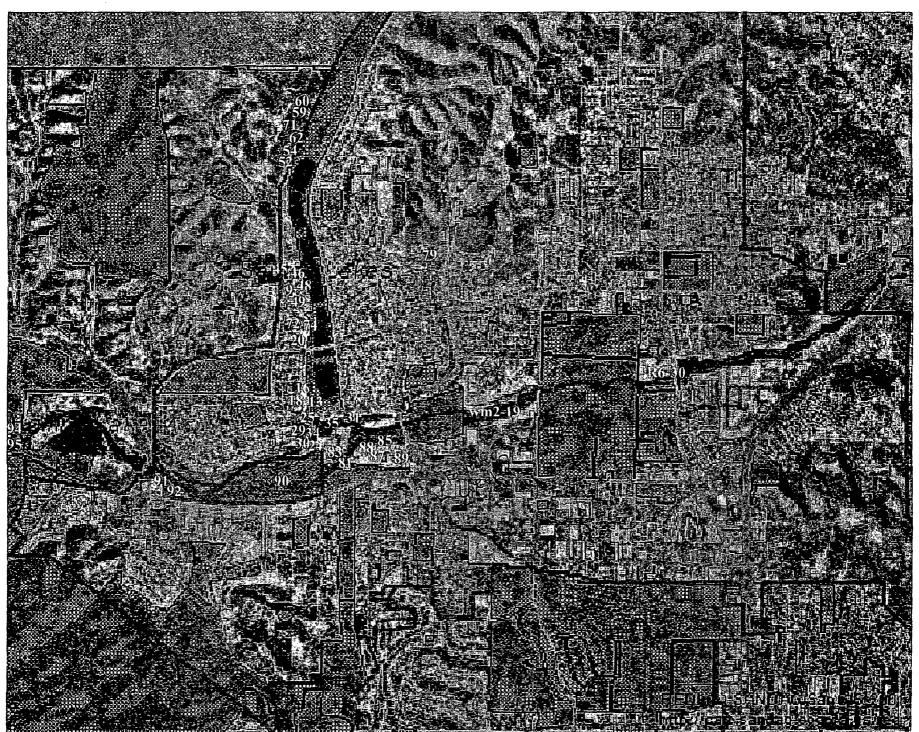
All three water bodies exhibited eutrophic conditions (algae blooms, algal mats, decomposing plant matter, offensive odors, stagnation). These conditions impair beneficial uses such as recreational swimming, fishing, and sensitive species habitat. Causes include nutrients from fertilizers, animal wastes, industrial wastes, and municipal wastes.

The San Diego River, Sycamore Creek, and Forrester Creek are all severely impaired by the invasion of exotic plants. These riparian areas provide habitat for sensitive and endangered species such as the least Bell's vireo. Giant reed (*Arundo donax*) and other invasive species are rapidly displacing the native habitat which native species depend upon.

Study Area:

The San Diego River watershed in the vicinity of Santee served as the focus area.

See Index Maps, San Diego River Watershed - Santee Segment



Sycamor = 9, 49, 13, 18, 25, 16, 17, 7151,60 90 87, 85, 88, 89 Family = 81

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San Vicente Creek	7.12	El Cajon, San Vicente Reservoir	0		•				- [•	•		•	•		
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Existing Beneficial Use

Waterbodies are listed multiple times if they cross hydrologic area or sub area boundaries.

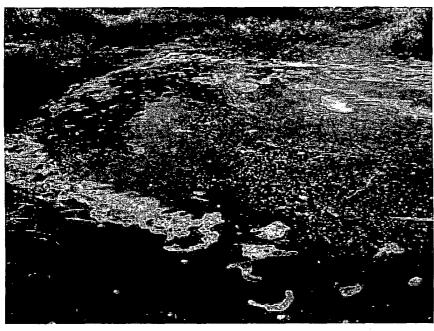
O Potential Beneficial Use

Beneficial use designations apply to all tributaries to the indicated waterbody, if not listed separately.

+ Excepted From MUN (See Text)

Photos demonstrate beneficial uses are impaired

MUN	beneficial use of municipal and domestic supply
AGR	beneficial use of softening supply
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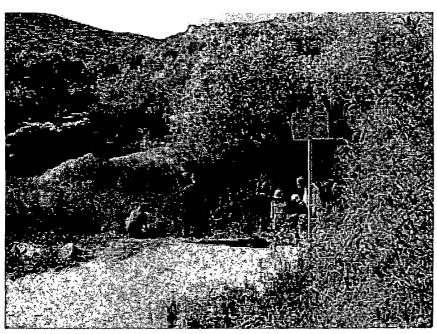


Photographs:

San Diego River

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Mission Trails Park Recreation Area: Foam and algae bloom. Bottom of river layered with algal mats and garbage. Recreators often swim and fish in the river despite the health risks.



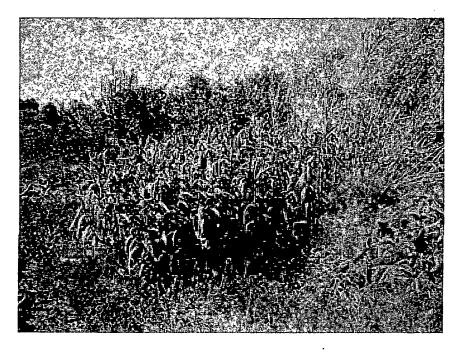
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Fisherman obtain polluted water for crayfish harvested from San Diego River at Mission Dam, Mission Trails Regional Park, City of San Diego. An adjacent picnic area is impacted by river odors.



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Invasive species in the San Diego River floodplain; Peruvian Peppertree (Schinus molle) and palm.



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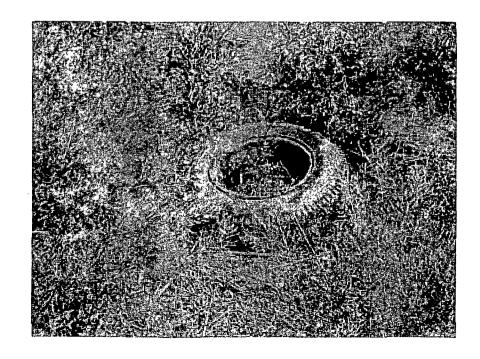
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Ranch junkyard adjacent to San Diego River. Site has approximately 30 decaying vehicles (hazardous waste) and is a direct source of animal waste from horse stables. (Located north of Mission Gorge Road at junction with Carribean and adjacent to K-Mart.)

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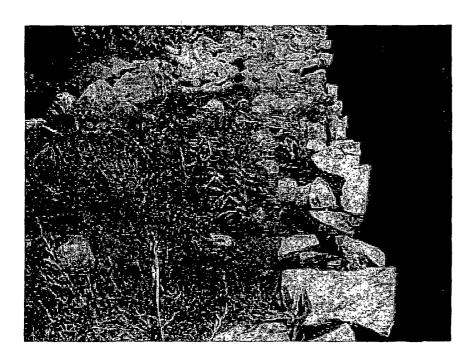
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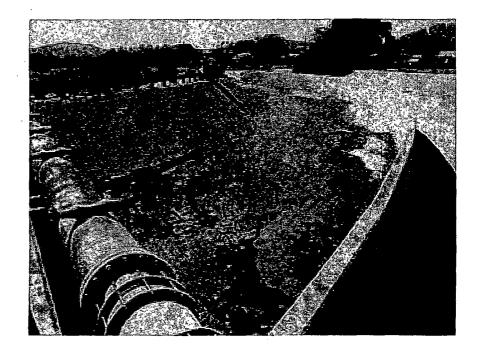
Fields of invasive *Arundo donax* in S.D. River floodplain on CALTRANS property damaged by the construction of SR-125.

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Algal mats and invasive palms at Fanita Creek entrance to S.D. River floodplain.

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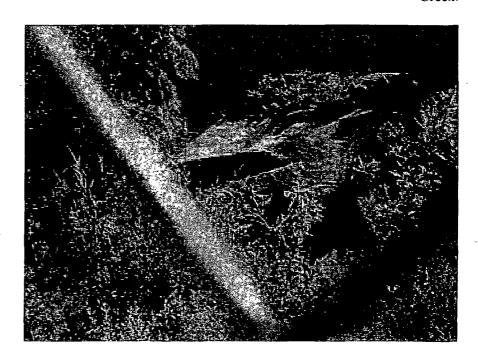
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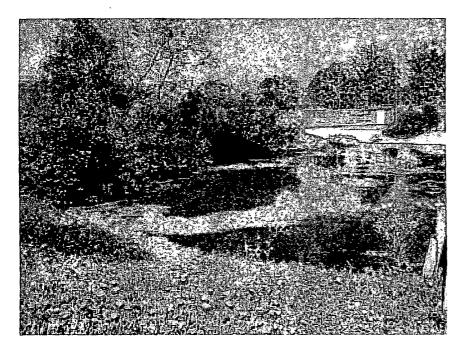
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Sycamore Creek (San Diego River to Fanita Ranch adjacent to Santee Lakes):

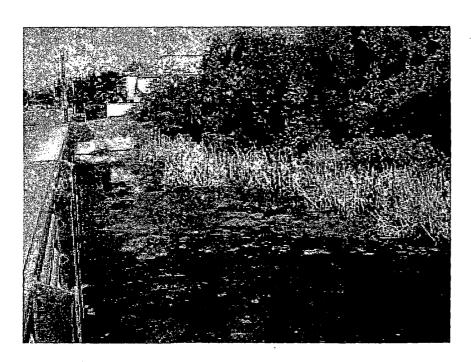
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Sycamore Creek at Carlton Oaks Bridge and Padre Dam Municipal Water District. Algal mats and invasive ice plant.

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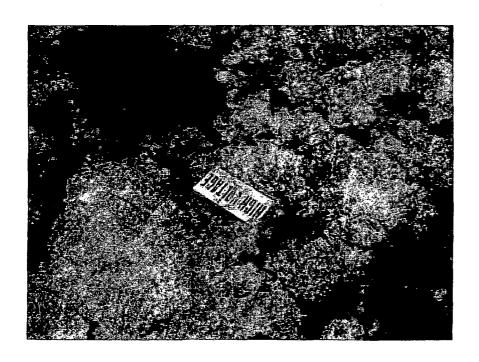




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Algal mats in Sycamore Creek at Carlton Oaks Bridge and Padre Dam
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Natural vegetation cleared and replaced with invasive ice plant and Blue Gum Eucalyptus (*Eucalyptus globules*). Sycamore Creek west of Santee Lake #1.

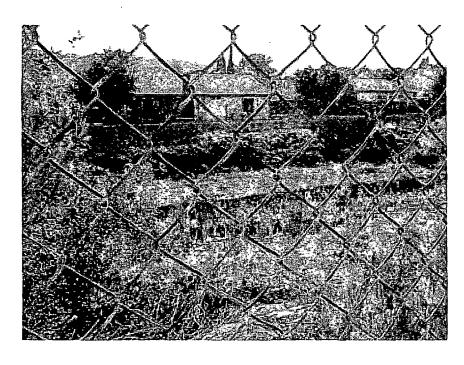
074_5-3-2001.jpg

Construction sediment on the bank of Sycamore Creek. Santee Lakes Regional Park adjacent to Lake #1.

020_5-3-2001 .jpg Sycamore Creek banks dominated by invasive plants such as *Arundo donax*



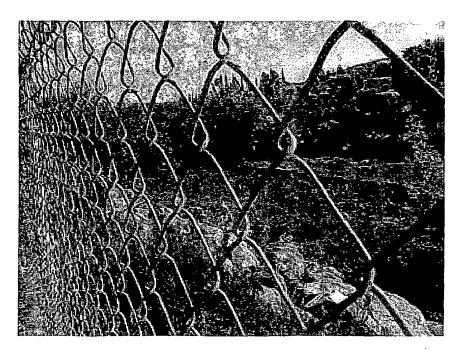


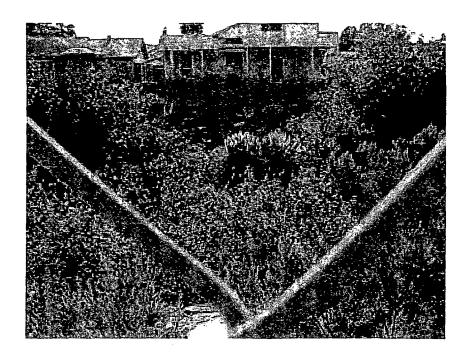


045_5-3-2001.jpg 046_5-3-2001.jpg

Numerous homeowners clear native vegetation to maintain their views of Santee Lakes. Vegetation is left to decay and be swept away by Sycamore Creek.

048_5-3-2001.jpg Pampass grass (*Cortaderia selloana*) invades Sycamore Creek.



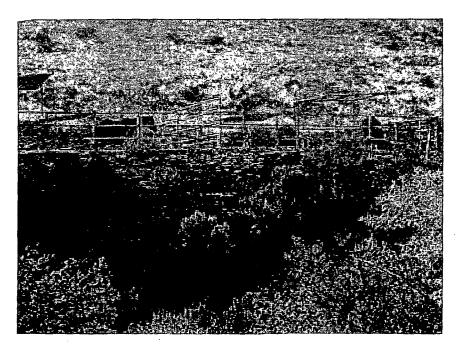


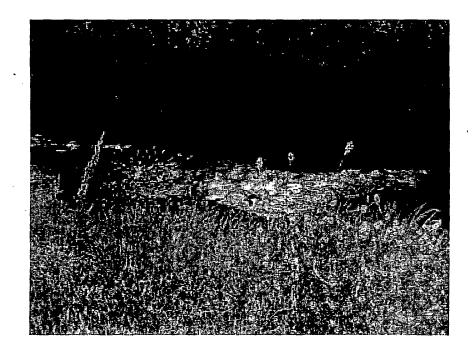


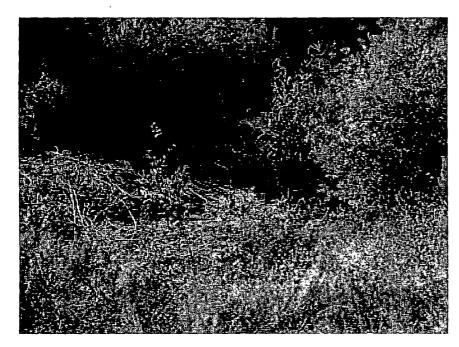
052_5-3-2001.jpg 054_5-3-2001.jpg

Horse stables at 10300 Pebble Beach Drive dispose of animal wastes by shoveling it over the bank directly into Sycamore Creek.

062_5-3-2001.jpg Algae blooms in Sycamore Creek adjacent to Santee Lakes Campground.







071_5-3-2001.jpg
Pampass grass (*Cortaderia selloana*) and Giant Reed (*Arundo donax*) invade
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060_5-3-2001.jpg 059_5-3-2001.jpg Tamarisk and palms invade Sycamore Creek adjacent to Santee Lakes campground.





wm02_5-8-2001.jpg wm09_5-8-2001.jpg Walmart parking lot drains directly into SD River. Garbage and algae on surface and bottom of SD River.

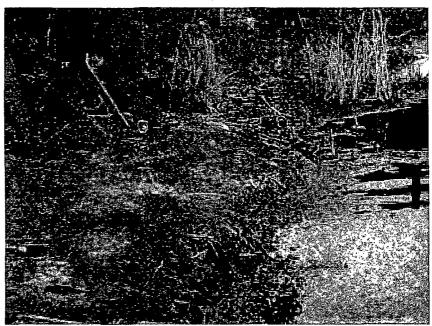
San Diego River

wm18_5-8-2001.jpg wm17_5-8-2001.jpg

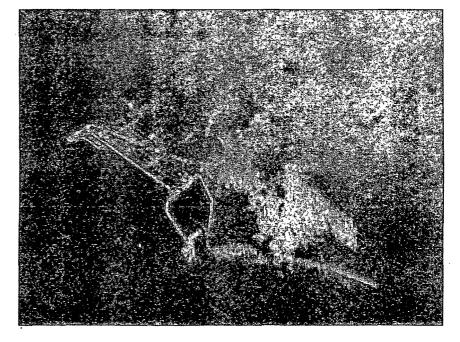


wm05_5-8-2001.jpg SD River is habitat for endangered least Bell's vireo. wm11_5-8-2001.jpg Shopping carts become solid waste.

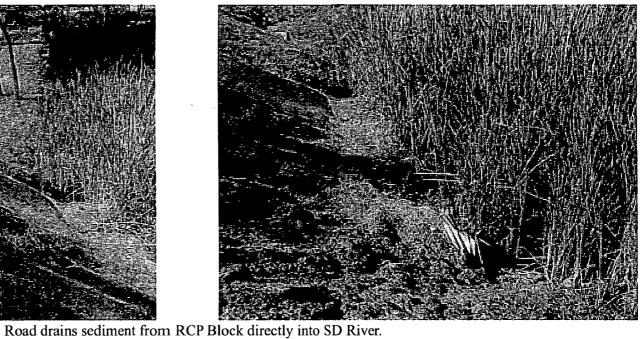




wm16_5-8-2001.jpg Plastic botttle, shopping cart, algae along river. wm19_5-8-2001.jpg Shopping cart and other waste in SD River.







R06_5-5-2001.jpg & R07_5-5-2001.jpg Road drains sediment from R11_5-5-2001.jpg Invasive *Arundo donax* and soiled diapers.



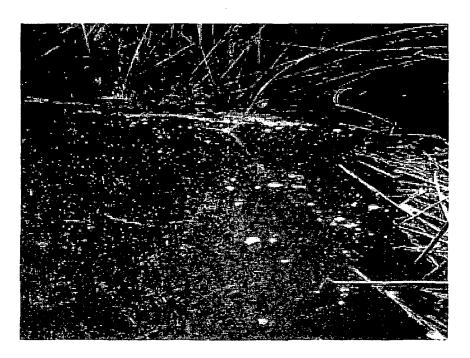
R15_5-5-2001.jpg Solid waste and algae in San Diego

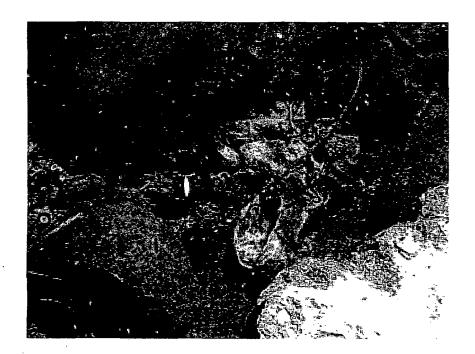


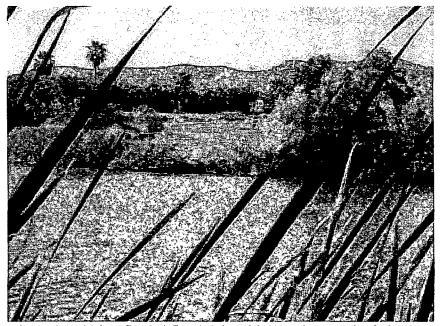


R16_5-5-2001.jpg Invasive *Arundo donax* in San Diego River.

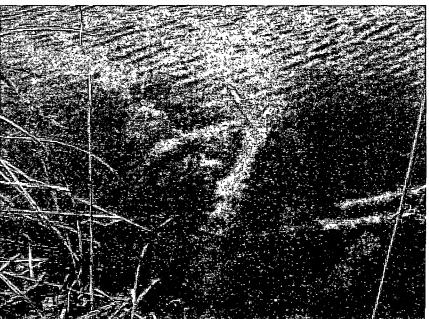
R18_5-5-2001.jpg & R14_5-5-2001.jpg Solid waste in the San Diego River.







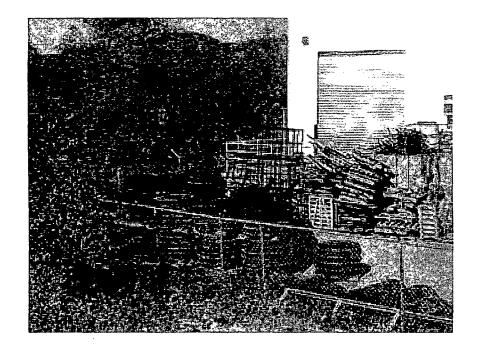
R27_5-5-2001.jpg Graded floodplain with invasive species in background. R26_5-5-2001.jpg Algae bloom east of RCP, SD River.

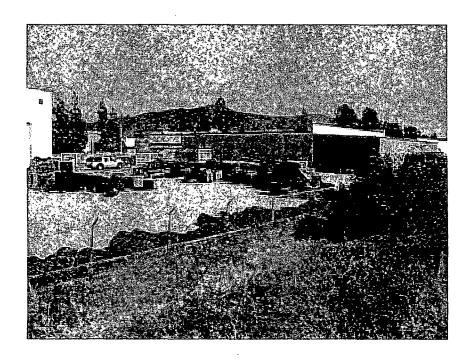




R21_5-5-2001.jpg Oil contamination. R25_5-5-2001.jpg. Solid waste in SD River floodplain.









R30_5-5-2001.jpg & R28_5-5-2001.jpg Industrial storage along the San Diego River bank east of Magnolia Avenue.

R20_5-5-2001.jpg

Tire caught on base of tree in San Diego River bottom.

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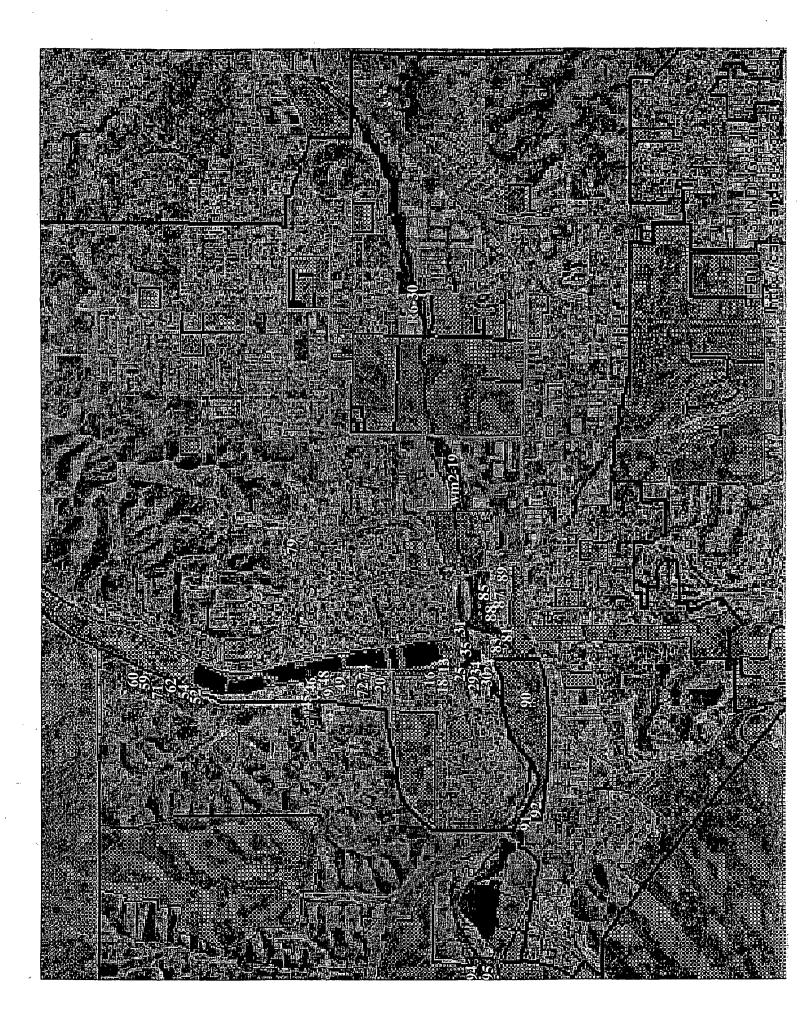
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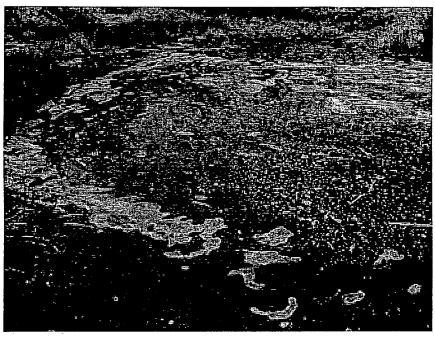
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Photos demonstrate beneficial uses pro impaired

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Adapted from the "San Diego River Basin Plan" Table T2-2345 44 - \$

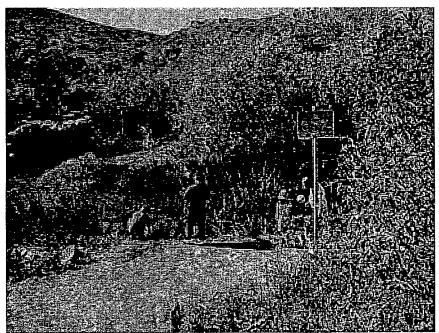


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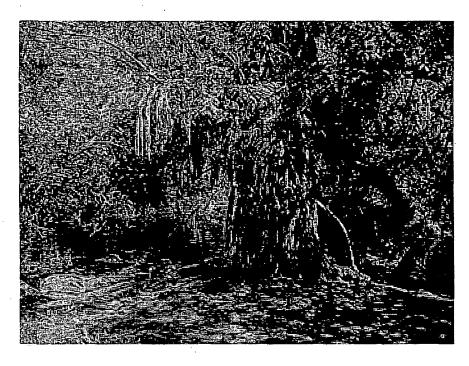
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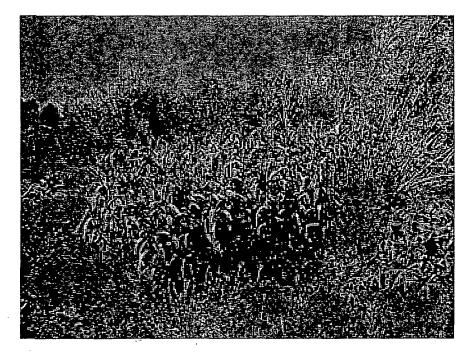
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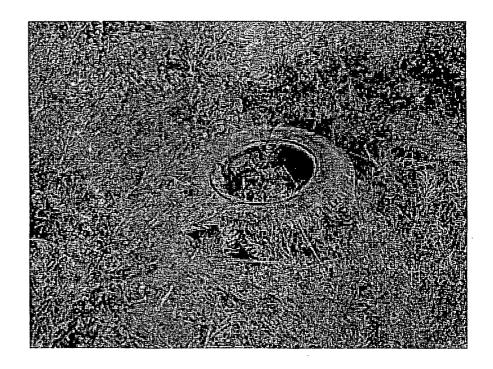
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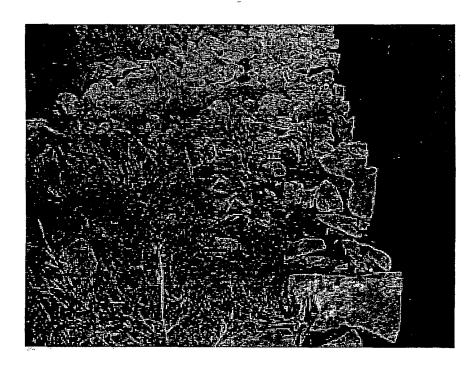
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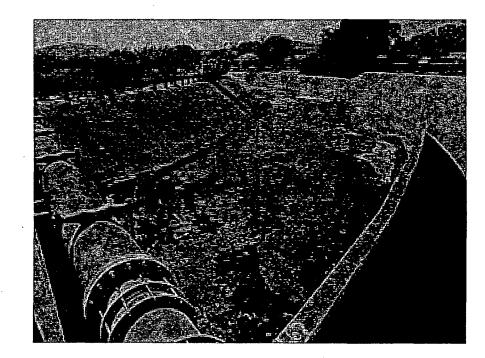
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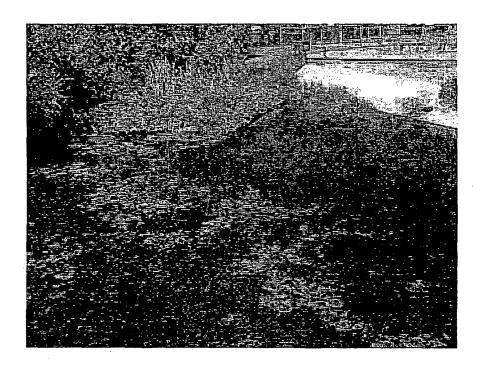
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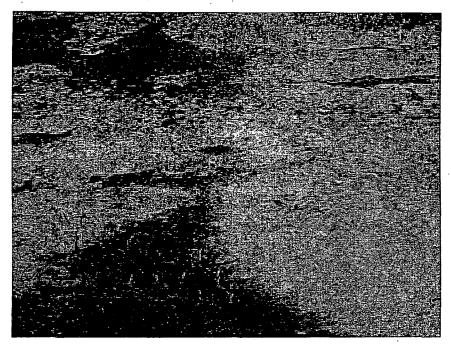
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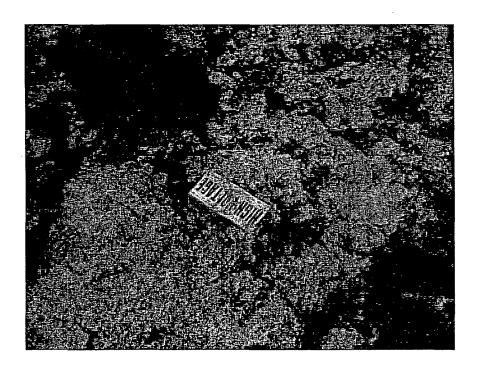




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072_5-3-2001.jpg

Natural vegetation cleared and replaced with invasive ice plant and Blue Gum Eucalyptus (*Eucalyptus globules*). Sycamore Creek west of Santee Lake #1.

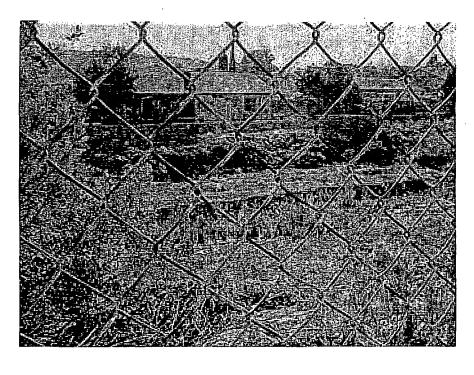
074_5-3-2001.jpg

Construction sediment on the bank of Sycamore Creek. Santee Lakes Regional Park adjacent to Lake #1.

020_5-3-2001 jpg Sycamore Creek banks dominated by invasive plants such as *Arundo donax*





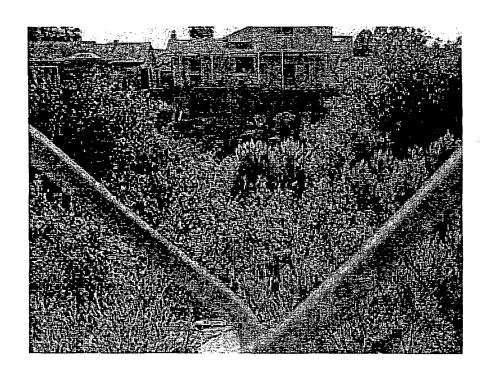


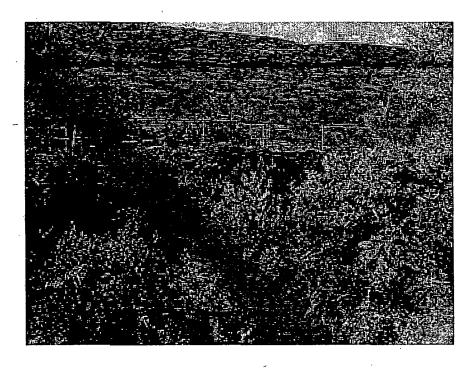
045_5-3-2001.jpg 046_5-3-2001.jpg

Numerous homeowners clear native vegetation to maintain their views of Santee Lakes. Vegetation is left to decay and be swept away by Sycamore Creek.

048_5-3-2001.jpg Pampass grass (*Cortaderia selloana*) invades Sycamore Creek.





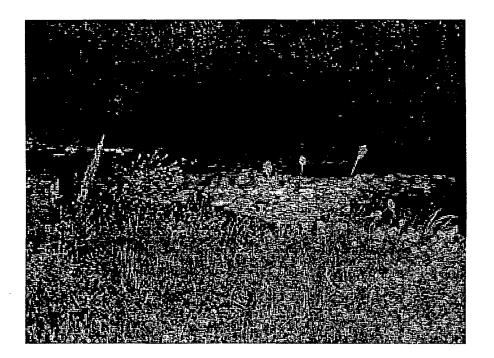


052_5-3-2001.jpg 054_5-3-2001.jpg

Horse stables at 10300 Pebble Beach Drive dispose of animal wastes by shoveling it over the bank directly into Sycamore Creek.

062_5-3-2001.jpg
Algae blooms in Sycamore Creek adjacent to Santee Lakes Campground.





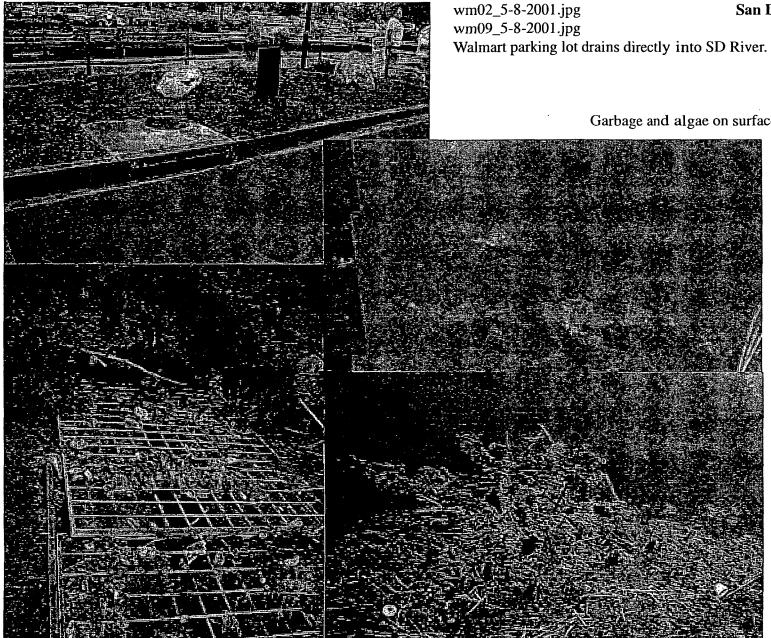


071_5-3-2001.jpg
Pampass grass (*Cortaderia selloana*) and Giant Reed (*Arundo donax*) invade
Sycamore Creek.

060_5-3-2001.jpg 059_5-3-2001.jpg Tamarisk and palms invade Sycamore Creek adjacent to Santee Lakes campground.

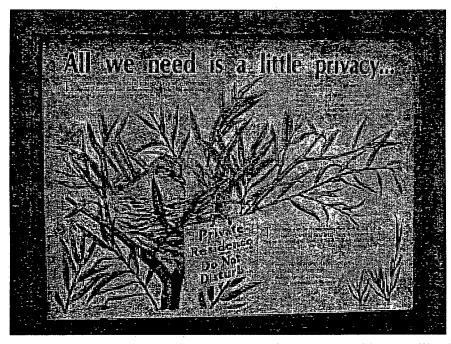




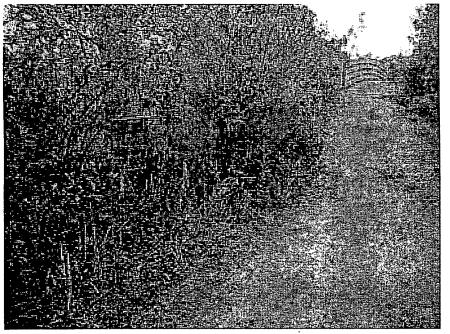


San Diego River

wm18_5-8-2001.jpg wm17_5-8=2001.jpg Garbage and algae on surface and bottom of SD River.

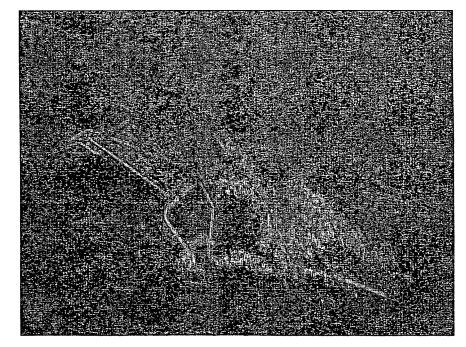


wm05_5-8-2001.jpg SD River is habitat for endangered least Bell's vireo. wm11_5-8-2001.jpg Shopping carts become solid waste.

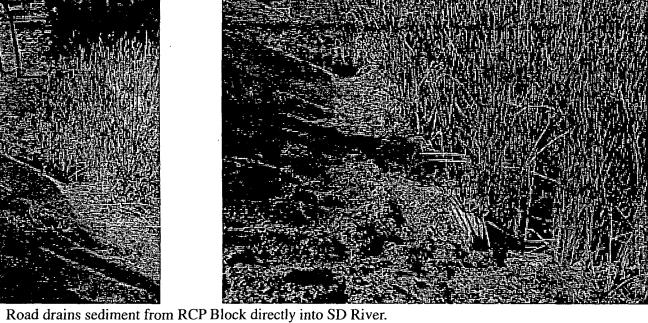




wm16_5-8-2001.jpg Plastic botttle, shopping cart, algae along river. wm19_5-8-2001.jpg Shopping cart and other waste in SD River.







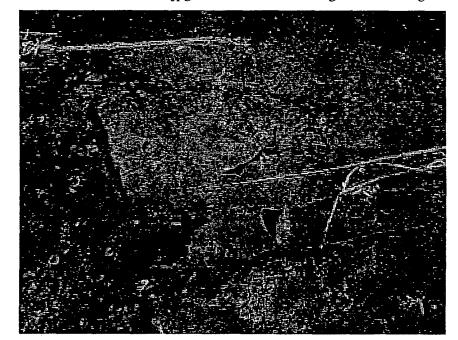
R06_5-5-2001.jpg & R07_5-5-2001.jpg R11_5-5-2001.jpg

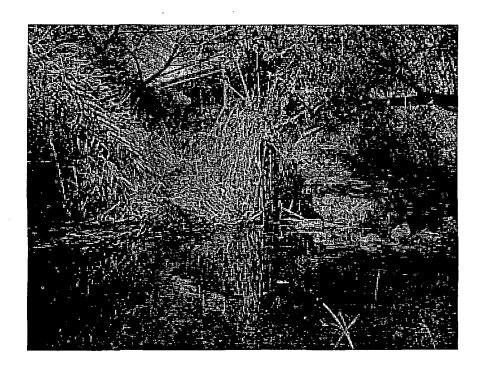
Invasive Arundo donax and soiled diapers.

R15_5-5-2001.jpg

Solid waste and algae in San Diego







R16_5-5-2001.jpg
Invasive *Arundo donax* in San Diego River.

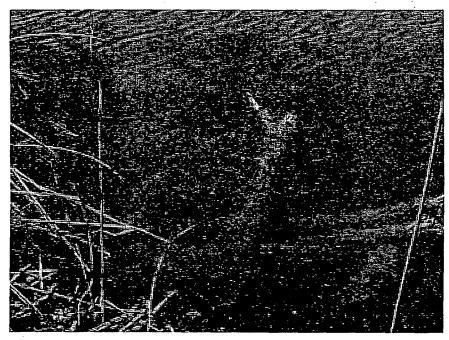
R18_5-5-2001.jpg & R14_5-5-2001.jpg Solid waste in the San Diego River.







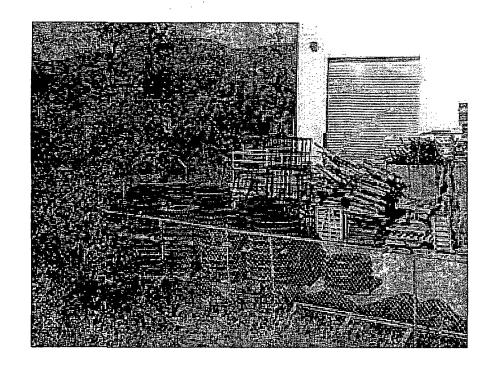
R27_5-5-2001.jpg Graded floodplain with invasive species in background. R26_5-5-2001.jpg Algae bloom east of RCP, SD River.

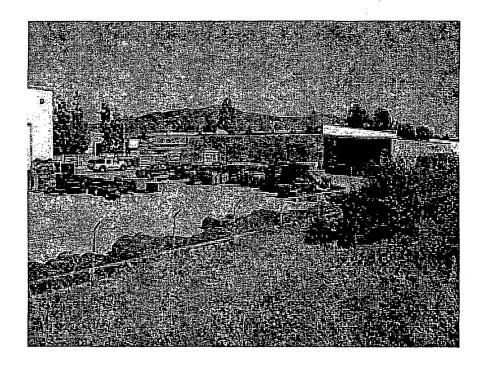




R21_5-5-2001.jpg Oil contamination. R25_5-5-2001.jpg. Solid waste in SD River floodplain.









R30_5-5-2001.jpg & R28_5-5-2001.jpg Industrial storage along the San Diego River bank east of Magnolia Avenue.

R20_5-5-2001.jpg

Tire caught on base of tree in San Diego River bottom.