Notice of Public Meeting
San Diego River Conservancy

A public meeting of the Governing Board of
The San Diego River Conservancy
will be held Thursday,
July 14, 2016
2:00 pm – 4:00 pm

Meeting Location

County of San Diego Administration Center (CAC)
1600 Pacific Highway, Room 302
San Diego, California 92101

Tele-Conference Location

Natural Resources Agency
1416 Ninth Street, Room #1311
Sacramento, CA 95814

Department of Finance
State Capitol, Room 1145
Sacramento, CA 95814

Contact:
Wendell Taper (619) 645-3183

Meeting Agenda

The Board may take agenda items out of order to accommodate speakers and to maintain a quorum, unless noted as time specific.

1. Roll Call

2. Approval of Minutes *(ACTION)*
   Consider approval of minutes for the March 10, 2016 meeting.

3. Public Comment *(INFORMATIONAL)*
   Any person may address the Governing Board at this time regarding any matter within the Board's authority. Presentations will be limited to three minutes for individuals and five minutes for representatives of organizations. Submission of information in writing is encouraged. The Board is prohibited by law from taking any action on matters that are discussed that are not on the agenda; no

adverse conclusions should be drawn by the Board's not responding to such matters or public comments.

4. Chairperson's and Governing Board Members' Report (*INFORMATIONAL)*

5. Deputy Attorney General Report (*INFORMATIONAL/ACTION)*

6. Diesel spill over the San Diego River (*INFORMATIONAL/ ACTION)*

   On May 13, 2016 a tanker truck overturned and spilled 3,700 gallons of diesel on Morena Boulevard bridge which crosses over the San Diego River near Highway 8. The diesel flowed down the bridge contaminating the river and the surrounding habitat. There will be a summary of clean up efforts to date.

   Presentation:
   Julia Richards, Executive Officer
   Kris Wiese, CA Department of Fish and Wildlife, Office of Spill Prevention and Response
   Kevin Heaton, County of San Diego, Department of Environment Health,
   Voluntary Assistance Program
   Angus McDonald, President SoCo Group

7. Proposition 1, the Water Quality, Supply, and Infrastructure Improvement Act of 2014 (*INFORMATIONAL / ACTION)*

   Update on San Diego River Conservancy's Round 1 grants. An overview of San Diego River Conservancy's Round 2, concept proposals due July 8, 2016

   Presentation:
   Julia Richards, Executive Officer

8. San Diego River Conservancy's Invasive removal and restoration program (*INFORMATIONAL)*

   Presentation:
   Dustin Harrison, Environmental Scientist

9. Executive Officer's Report (*INFORMATIONAL / ACTION)*

   The following topics may be included in the Executive Officer's Report. The Board may take action regarding any of them*:*

   - Proposed 2017 Board Meeting dates:
     (January 12, March 9, May 11, July 13, September 14, November 9)
   - Council of Water Utilities meeting (San Diego County)
   - San Diego River Trail - Flume Trail Extension
   - All Conservancy Meeting

10. Next Meeting

The next scheduled board meeting will be held Thursday, September 8, 2016, 2:00-4:00 p.m.

11. Adjournment

Accessibility

If you require a disability related modification or accommodation to attend or participate in this meeting, including auxiliary aids or services, please call Wendell Taper at 619-645-3183 or Julia Richards 619-645-3183.

State of California
San Diego River Conservancy

Meeting of July 14, 2016

ITEM: **1**

SUBJECT: **ROLL CALL AND INTRODUCTIONS**

State of California
San Diego River Conservancy

Meeting of July 14, 2016

ITEM:	**2**
SUBJECT:	**APPROVAL OF MINUTES *(ACTION)*** The Board will consider adoption of the **March 10, 2016** public meeting minutes.
PURPOSE:	The minutes of the Board Meeting are attached for review.
RECOMMENDATION:	Approve minutes

SAN DIEGO RIVER CONSERVANCY
Minutes of March 10, 2016 Public Meeting

(Draft Minutes for Approval on July 8, 2016)

CONSERVANCY Board Chair, Ben Clay called the March 10, 2016 meeting of the San Diego River Conservancy to order at approximately 2:00 p.m.

1. Roll Call

Members Present

Bryan Cash	Natural Resources Agency, Alternate Designee (via phone)
Karen Finn	Department of Finance, Alternate Designee (via phone, left 3:02 pm)
Brent Eidson	Mayor, City of San Diego, Designee
Scott Sherman	Councilmember, City of San Diego, District 7
Dianne Jacob	Supervisor, County of San Diego, Second District
Ben Clay, Chair	Public at Large
Ruth Hayward	Public at Large
Deanna Spehn	Speaker of the Assembly, Appointment
Andrew Poat	Public at Large (arrived 2:15 pm)
John Donnelly	Wildlife Conservation Board

Absent

Lisa Mangat	Department of Parks and Recreation
Ann Haddad	Public at Large
Gary Strawn	San Diego Regional Water Quality Control Board

Staff Members Present

Julia Richards	Executive Officer
Wendell Taper	Administrative Services Manager
Dustin Harrison	Environmental Scientist
Hayley Peterson	Deputy Attorney General

Ben Clay asked for Deputy Attorney General Hayley Peterson swear in the newest member.

Hayley Peterson administered the oath of office to Deanna Spehn.

Ben Clay welcomed Deanna to the Board.

2. Approval of Minutes

Scott Sherman moved for approval of the January 14, 2016 meeting minutes and Brent Eidson seconded. Roll Call: Ayes: Brent Eidson, Scott Sherman, Karen Finn, Dianne Jacob, Ben Clay, Ruth Hayward, Deanna Spehn (Abstained) , (6-1-0)

3. Public Comment (*INFORMATIONAL)*

Rob Hutsel shared that the San Diego River Park Foundation (TSDRPF) closed in January 2016 on a 299 acre acquisition in Temescal Creek. The acquisition included over $500,000 dollars in private funds and was supported by the community. TSDRPF also participated in a homeless count along the San Diego River. The numbers were up significantly, over 200 people live along the river. Reminded the Board that tomorrow starts the San Diego River kids Discovery Days. He stated more than one thousand kids and family members will be out and it will be a wonderful event.

4. Chairperson's and Governing Board Members' Report (*INFORMATIONAL/ACTION)*

Ben Clay stated he went out and walked the reaches of Alvarado Creek near San Diego State University and saw the invasive removal project and saw where the floods occurred. He encouraged the other Board Members to get out and take a look the projects.

5. Deputy Attorney's General Report

Hayley Peterson, Deputy Attorney General reminded Board Members to submit form 700s, no later than March 24. Staff will forward them to the Fair Political Practices Commission. She thanked those who have already submitted their forms.

Ben Clay underscored the importance of getting that done because next item due is ethics certification. The State of California's version.

Brent Eidson asked does completing ethics training for the City of San Diego satisfy the State ethics requirement?

Hayley Peterson replied no. Since the local agency requirements are slightly different than the State's, everyone will need to complete training twice.

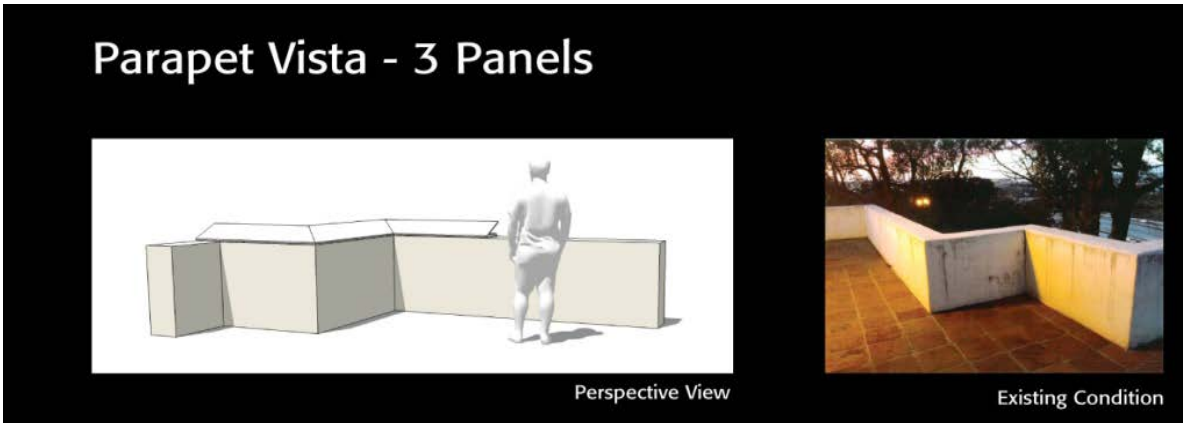
Item 6. San Diego History Center - Implementation of the Interpretive Plan *(INFORMATIONAL)*

Julia Richards stated the Board had previously approved a $250,000 grant to San Diego History Center (SDHC) for implementation of the interpretative plan for the Junipero Serra Museum. She introduced Bill Lawrence, the Executive Director for an update.

Bill Lawrence described a partnership the SDHC and the San Diego River Conservancy (SDRC) have been working on for about five years. The SDRC and the State Coastal Conservancy funded the Serra Museum's interpretive plan. This project is the outgrowth of the partnership.

The Presidio of San Diego is the birthplace of California and the birthplace of San Diego. On top of Presidio Hill sits Mr. Marsten's office in a historic building. It has an incredible view of Mission Valley and the San Diego River. This project takes Mr. Marsten's office and makes it a welcome center. The room displays will show the establishment of the Presidio and Presidio Park reinforcing that the San Diego River is the reason all of this is there. This room will show the San Diego River present and river past, utilizing historic imagery from the SDHC. These displays will tell the story of the first settlers and the native people who used the river long ago.

The second part of the project is design and installation of an exterior exhibit. Currently there is no exterior interpretation on the Serra Museum. This is going to be the first part of interpreting the site and the San Diego River view exhibit using contemporary and historic imagery to explain the story and the development of Mission Valley community.



Ben Clay asked when the project will be completed.

Bill Lawrence plans to complete it by July. Initial media is being designed, interpretative panels completed and the SDHC will break ground within the next two weeks.

Ben Clay commented one of the challenges is getting Americans with Disabilities Act (ADA) access to the museum. The City of San Diego is aware of that.

Bill Lawrence responded the Historic Structures Report has helped jump start the City and its investment in Presidio Park particularly for ADA. The City Council at its meeting, in December or January, approved $1 million of Mission Bay Regional Park funds of $1.5 million requested for ADA accessibility. That process is underway now. SDHC met the whole group and expects to have the City's preferred alternative for ADA accessibility by the end of this year.

Ben Clay thanked Bill and looks forward to continue working with SDHC.

Item 7. Lakeside's River Park Conservancy – Invasive Removal Project Information Report *(INFORMATIONAL)*

Julia Richards introduced Lakeside's River Park Conservancy's (LRPC) project as part of the San Diego River Conservancy's invasive removal program for the San Diego River watershed. It is funded by SDRC's Prop 84 funds held by the State Coastal Conservancy. The project is for removal and control of 35 acres of invasive plant species along Los Coches Creek in Lakeside.

Robin Rierdan discussed Arundo donax: the history, removal, herbicide treatments, re-vegetation and how LRPC keeps the community involved. LRPC began this project in 2011 and held a meeting with the community to promote removal and explained the fire hazards. Over 100 property owners showed at to that meeting. The Los Coches Creek fire, three years ago, took 10 fire units and helicopters to contain. The fire did not cause major structural damage, but unfortunately killed a woman who lived in the Arundo.

LRPC has removed about 35 acres of Arundo (and other non-native species) from 100 private properties along Los Coches Creek using SDRC's watershed wide permit. The removal process uses fire crews to cut Arundo with chainsaws, bundles and hauls them out to either a chipper or a dumpster and taken to the Sycamore Canyon landfill. We begin around September 15 and start spraying when the plants are 4-6 ft tall. The herbicide, round up and imazopyr, works best when applied to a lot of foliar area. Re-vegetation includes installing native plants that will root in the streambed (willow, baccharus, mulefat and cottonwood). It's a very cost effective way to re-vegetate.

The Lakeside community has been amazed at having a streambed back. They don't have a sense of what their creek can look like when it's re-vegetated and we explained that to them. We held a community involvement meeting last

month and residents were thrilled to help re-vegetate. We explained how and where to do willow staking and watering. All were eager to begin maintaining their section of the creek.

Ben Clay asked Robin if there any downstream impacts when we've had rains and water flowing in these areas.

Robin Rierdan recounted the storms that came in January flooded the creek bank to bank over top. Chipped material traveled downstream and were picked up. In Los Coches Creek a lot of sediment moves into the creek. The impact of a creek causes erosion and sediment transport.

The west pond at the LRPC and east pond have been the recipient of this sediment. The sediment creates deltas slowly moving across old sand mining pits. Remember, all of this sand is supposed to end up at the beach. Its moving downstream going into our ponds the way it should. When they become filled which will be 20-30 years from now, then it will be moving down towards Mission Dam. For us, that sediment is not eroding and depositing in other people's lands. It's doing exactly what it should be on our property site which is filling up those ponds.

Item 9. San Diego River Conservancy – Proposition 1 Grant proposed projects recommended for funding (*ACTION)*

Julia Richards summarized the San Diego River Park Foundation's (TSDRPF) application: $151,500 to construct and install one aeration device in the San Diego River to increase dissolved oxygen levels in Mission Valley, located in the city of San Diego. Water monitoring data will be collected. Applicants matching funds are $29,000, staff recommendation for funding is in the amount of $88,800. Additional details are provided in the staff report for SDRC Resolution 16-03 and were included in the Board Book. She introduced Ryane Moss and Shannon Quigley-Raymond from TSDRPF.

Installation and construction of an aeration device in the San Diego River
(Mission Valley, City of San Diego) *(ACTION)*

Ryane Moss, project manager stated this project was designed to identify and address the very existence of water quality challenges previously identified in the lower San Diego River, which is dissolved oxygen. Dissolved Oxygen (DO) is necessary for everything that's living in the water. There are certain components that play a role in decreasing dissolved oxygen, the biggest of which are increased water temperature, decreased water flow and an increase in the number of organisms in the water.

Negative impacts can occur when dissolved oxygen drops below 5mg/L. This number was identified on the State of California's Water Quality Control Plan for the San Diego Basin (Plan) that said DO should be a minimum of 5mg/L in the San Diego River. The Foundation's RiverWatch program is water quality monitoring program. Testing over the last 2 years averaged 2.75mg/L. More dramatically is with drier weather, the numbers dropped down to 0.06mg/L. This is when lots of dead fish are seen and pungent odors throughout Mission Valley makes the river and trail very uninviting.

There are several possible solutions to the issue of low DO. TSDRPF presents this as a proof of concept proposal. Installing a solar aeration array based on the recommendations of the U.S. Bureau of Reclamation (USBR).

Shannon Quigley-Raymond stated the USBR did a study with SDRPF about ways to improve the aquatic ecosystem health for the San Diego River. One option was to install solar aerators. Solar aerators, similar to power generation, allow transfer of oxygen from the air to the water. The aerators improves and adds more oxygen to the water and allows it to circulate to deeper levels where lower levels of DO are found. Beyond that this system is solar power, there is no structure beyond the unit. It is a complete setup.

Ryane Moss There are several benefits to a system like this as it addressed the root of the problem which is low

circulation flow, low profile, cost effective and it very low risk for vandalism. The array will need to be removed seasonally. The system would be removed from the river during any storm events.

This area is known to suffer from low DO year after year and this site was chosen over a few others because of high fish die-offs and strong odors in the area. This location has a more consistent depth throughout this section. The project goal is to get the DO up to a baseline of 5mg/L or better throughout the water column. This proposal is estimated to have 11 acres (0.25 miles) of impact and expected to see a change in DO. In addition, there will be monitoring both upstream and downstream to confirm.

Invasive aquatic vegetation thrives in lower DO since they can survive these conditions better than native species. So there's an added benefit of restoring DO to provide better habitat for native species.

Additionally, TSDRPF engages the community and provides every opportunity to be stewards of the river and hopes to increase public awareness by 25%. We would measure by doing pre and post surveys. For people in Mission Valley the San Diego RIver is their backyard. TSDRPF will conduct outreach to inform the community members about the project and let them know how they can be a part of the solution. The public impacts directly affects the water quality along the lower San Diego River.

Shannon Quigley-Raymond stated the Foundation's RiverWatch program is a citizen science monitoring program. It started in 2004 as a baseline data collection to collect water quality data for the lower San Diego River. It has become a robust ambient monitoring program with established quality assurance plans and protocols. SDRC Board Member, Gary Strawn is a RiverWatch members. The program monitored baseline water quality data at seven stations in Mission Valley, six in Santee and one in Mission Trails Regional Park for the past 12 years.

Ryane Moss noted TSDRPF has a technical advisory committee advising the project and a very robust volunteer program. Also, TSDRPF has experience managing grants through State bond funding, the San Diego Association of Governments (SANDAG) and is excited to work with SDRC.

The bulk of this project is implementation and installation of the solar aeration array including the U.S. Bureau of Reclamation in this process. Urban Corp will help with on the ground installation and seasonal storm event removal of the aeration array. SDSU will help with the more detailed monitoring of this project. Certainly a goal is to identify whether this aeration array is in fact a good solution for increasing DO in the lower San Diego River.

Restoring the river parkway is an important asset to the community and includes protecting and restoring our aquatic ecosystem, habitat for wildlife and making sure the endangered species and migratory birds that call the San Diego River watershed home.

Ruth Hayward thanked Ryane for this presentation and added this is an exciting project. She had a few questions. The people that are going to be doing the sampling and testing of DO, Are TSDRPF volunteers or SDSU?

Shannon Quigley-Raymond responded yes. SDSU will be overseeing real time temperature loggers and the TSDRPF team will come provide volunteers for sampling.

Ruth Hayward asked if SDSU does their actual DO testing with portable kits or do they take it into the lab. She asked if the configuration and how deep in the water column will the array be?

Shannon Quigley-Raymond responded DO will be measured in the field. The solar panel will sit on top of the unit, the array will sit at the surface, and the tube goes down two feet into the water column.

Ruth Hayward asked a few other questions: If two feet is the depth of the array where the bubbles come out? What size bubbles you're planning on? Also is there variable outputs that can be released in the amount of bubbles? In other words, can you increase the pressure and make the bubble output greater up to the capacity of the system or

would you have to increase the array size?

Shannon Quigley-Raymond responded she did not know the size of the bubbles but USBR will work with the equipment to adjust the bubble size to appropriate levels to the desired results.

Ruth Hayward Thanked Shannon and Ryane.

Dianne Jacob enjoyed Ruth's questions but that kind of gets to her question because she is not a scientist. How would she see dissolved oxygen?

Ryane Moss responded in a natural system you'll see it in the form of waterfalls aerating its own water. That mixing incorporates air into it so it is absorbed into the water body. This results in higher DO levels which improves native ecosystem, fewer invasive water plants, and certainly a decrease in unpleasant odor.

Ben Clay Look at it in a fish tank. See that bubbler at the bottom gurgling up? That's what you're looking at. You've got a big one of those to inject oxygen into the water.

Ryane Moss agreed.

Andrew Poat asked if the size of the bubble makes what difference?

Ruth Hayward responded to be ideal the size of the bubble should be less than 2mm diameter because the transfer from the bubble to the surface of the water is going to increase with the more bubbles you have.

Andrew Poat asked for clarification on the budget? What exactly is technical implementation and monitoring?

Ryane Moss responded that is including the cost of the solar aerator, labor to install and maintenance.

Scott Sherman has been working to get something behind the Fashion Valley Mall by the golf course. He was very excited to see the fly fishing association involvement. They know the ins and outs to healthy ecosystem and are a valuable resource of knowledge.

Dianne Jacob asked if she has a glass of Coca-Cola and blows into the straw that glass of coke is being aerated iand increasing the DO?

Ryane Moss said that's a good analogy.

Brent Eidson moved to approve Resolution 16-03 and seconded by Deanna Spehn.
Roll Call: Ayes: Brent Eidson, Scott Sherman, Deanna Spehn, Bryan Cash, Karen Finn, Dianne Jacob, Ben Clay, Ruth Hayward, Andrew Poat. (9-0-0)

Restoration of approximately 25 acres of Rueda Canyon Open Space Preserve (City of San Diego)

Julia Richards Next Prop 1 proposal in front of the Board today is from San Diego Canyonlands (SDCL). SDCL applied for funding in the amount of $42,394 for habitat restoration of approximately 25 acres in Rueda Canyon Open Space Preserve by removing non-native invasive plant species and installation of native riparian and transitional plant species. The project also includes components for reducing sediment runoff and filtering stormwater. Applicant's matching funds are $42,000. Staff recommendation for funding for this applicant is in the amount of $42,300. Additional details are provided in the staff report for Resolution 16-04 and were included in the Board Book. She introduced Eric Bowlby with the SDCL.

Deanna Spehn noted a point of order. This proposal is proposed in her community of Tierrasanta she chairs the Open Space Committee for Rueda Canyon. She asked if there was a conflict?

Hayley Peterson responded no unless there will be a financial impact or benefit to you. This disclosure is fine and you're welcome to vote.

Eric Bowlby Executive Director for SDCL introduced himself. SDCL is working to preserve and restore canyons throughout the city and county of San Diego. I want to thank you very much for considering our application to reduce sediment from eroding trails.

The proposed project is for removal and control invasive non-native plants in 25 acres so they don't continue to propagate throughout Rueda Canyon and the San Diego River Watershed. The most problematic are tamarisk, palm trees, and pampas grasses. The project also includes 1.24 acres of wetland restoration, a quarter mile of erosion repair and a little over half an acre in uplands restoration. Benefits of the project include reducing the spread of invasive plant species, reducing pollutants mainly in the form of trash and encampments and sediment which is a way pollutants are transported down to the San Diego River. It also includes reducing the fuel load by removing palms and other debris. Palm trees redirect water flows causing erosion and destabilization of the stream banks and encroach on more native habitat, and tamarisk is another invasive plant species that absorbs a lot of water. These trees really choke out native vegetation and outcompete them in the stream corridor.

The California Conservation Corps and San Diego County Urban Corp have agreed to partner on this project. In addition Urban Corp and their core members will provide volunteer in-kind contribution. Volunteers will provide for restoration and debris removal. SDCL partners with local volunteers and other groups. James and Maria Sanders from the friend's group promised to help implement this project. The friends group is key because they do routine stewardship, on the ground participation in the canyons which is critical for success. SDCL educates the community to why invasive removal and restoration is important to our biodiversity, our water quality, and how it's all connected as it runs down to the ocean.

SDCL's goal is to restore canyons in the City for San Diego.

Scott Sherman thanked Eric for the presentation. He asked about the process to get rid of the pampas grass and palms.

Eric Bowlby agreed pampas grass is tenacious. Currently SDCL uses applications of an approved safe herbicide for aquatic environments. In December 2014, in Tierrasanta, SDCL partnered with the Maintenance Assessment District and brought in funding to remove about 60 palms by helicopter.

Deanna Spehn stated the community paid the Maintenance Assessment District year $17,000 to do the next phase.

Scott Sherman was very supportive of trying to return the habitat to a more natural state without all the introduced invasive species. He made a motion to approve Resolution 16-04.

Ruth Hayward asked if SDCL will plant native species to control erosion?

Eric Bowlby Yes, control erosion with a number of measures such as straw wattles and things like that to slow it down, trap sediment and plant behind it to re-vegetate these renegade trials and discourage continued use.

Ruth Hayward have you had any problems being exasperated by weed abate from the fire department? She received a complaint that they put native plants all over the property line and then every year the fire department comes in with people who are paid to whack things down to the ground and that starts it all over again.

Eric Bowlby The Brush Management Zone (BMZ) is an incredibly important project. Obviously it would create defensible space between homes and our natural open space and chaparral. There is a recipe for the BMZ of native vegetation that would be low growing and require less maintenance, but for now the routine clearing of non-native and native vegetation. When SDCL does restoration of the BMZ they have a list that's approved for native vegetation that no space is required. It grows low and it doesn't have a lot of woody fuel to it.

Andrew Poat asked to review the volunteers for $20,000, in the budget.

Eric Bowlby responded that's an in-kind contribution of volunteer labor at $20,000. San Diegans love their neighborhood canyons and they are willing on a routine basis to take care of them.

Ben Clay thanked Eric.

Scott Sherman moved for approval of Resolution 16-04 and Deanna Spehn seconded.
Roll Call: Ayes: Brent Eidson, Scott Sherman, Deanna Spehn, Bryan Cash, Karen Finn, Dianne Jacob, Ben Clay, Ruth Hayward, Andrew Poat. (Passed 9-0-0)

Ben Clay said that takes care of items related to Prop 1.

Karen Finn thanked Ben and left the meeting.

9. Executive Officer's Report *(INFORMATIONAL / ACTION)*

Julia Richards said this completes SDRC's funding for Proposition 1 for the fiscal year 15/16. She thanked all the Board Members for their support and expects agreements to be completed by summer/fall. Round 2 for Proposition 1 (Fiscal Year 16/17). Concept proposal period is May 30 – July 8 and full applications are due September 15. If you have any questions you can feel free to contact myself or staff.

SDRC's first right of refusal on the three surplus properties owned by Helix Water District in El Monte Valley. We requested an extension through July 30, 2016.

The Flume Trail Extension project includes an easement for a trail and trailhead to San Diego County generously donated Helix Water District's. The County will be responsible for maintenance and operation of that trail when completed.

The City of Santee was notified that they will be receiving a merit award for trial development at the California Trails and Greenway Conference regarding the Walker Preserve Trail. SDRC help fund the acquisition of the Walker Preserve. The letter stated "they would like to thank the SDRC staff and Board who had the foresight to pursue the acquisition of the trail so it could be used to fulfill a critical gap in the San Diego River Trail."

Ben Clay noted before and after drone videos of projects will be incorporated and used as part of the SDRC's required report to the legislature

Brent Eidson added the SDRC website does not have a lot of recreational opportunities.

Ben Clay adjourned the Meeting.

Meeting adjourned at 3:25 pm

State of California
San Diego River Conservancy

Meeting of July 14, 2016

ITEM: **3**

SUBJECT: **PUBLIC COMMENT**

PURPOSE: Any person may address the Governing Board at this time regarding any matter within the Board's authority. Presentations will be limited to three minutes for individuals and five minutes for representatives of organizations. Submission of information in writing is encouraged. The Board is prohibited by law from taking any action on matters that are discussed that are not on the agenda; no adverse conclusions should be drawn by the Board's not responding to such matters or public comments.

State of California
San Diego River Conservancy

Meeting of July 14, 2016

ITEM: **4**

SUBJECT: **CHAIRPERSON'S AND GOVERNING BOARD MEMBERS' REPORTS *(INFORMATIONAL)***

PURPOSE: These items are for Board discussion only and the Board will take no formal action.

State of California
San Diego River Conservancy

Meeting of July 14, 2016

ITEM: **5**

SUBJECT: **DEPUTY ATTORNEY GENERAL REPORT**
(INFORMATIONAL/ACTION)

State of California
San Diego River Conservancy

Meeting of July 14, 2016

ITEM: **6**

SUBJECT: DIESEL SPILL OVER THE SAN DIEGO RIVER
(*INFORMATIONAL/ ACTION)*

On May 13, 2016 a tanker truck overturned and spilled 3,700 gallons of diesel on Morena Boulevard Bridge which crosses over the San Diego River near Highway 8. The diesel flowed down the bridge contaminating the river and the surrounding habitat. There will be a summary of clean up efforts to date.

Presentation:
Julia Richards, Executive Officer
Kris Wiese, CA Department of Fish and Wildlife,
Office of Spill Prevention and Response
Kevin Heaton, County of San Diego, Department of Environment Health, Voluntary Assistance Program
Angus McDonald, President SoCo Group

State of California
San Diego River Conservancy

Meeting of July 14, 2016

ITEM: **7**

SUBJECT: PROPOSITION 1, THE WATER QUALITY, SUPPLY, AND INFRASTRUCTURE IMPROVEMENT ACT OF 2014 (*INFORMATIONAL / ACTION)*

Update on San Diego River Conservancy's Round 1 grants. An overview of San Diego River Conservancy's Round 2, concept proposals.

Presentation:
Julia Richards, Executive Officer

State of California
San Diego River Conservancy

Meeting of July 14, 2016

ITEM: **8**

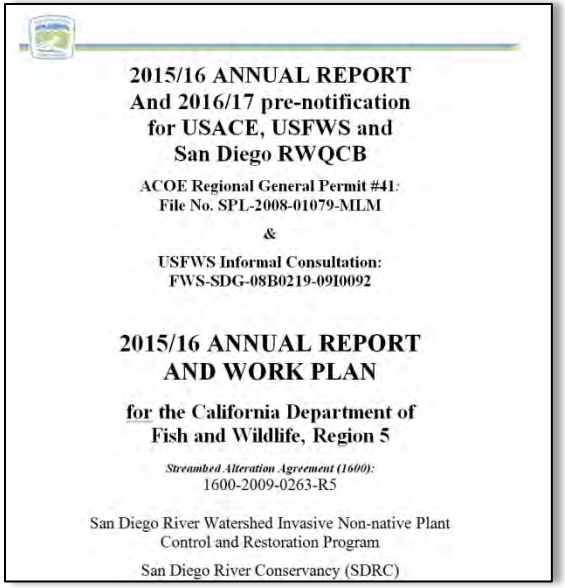
SUBJECT: SAN DIEGO RIVER CONSERVANCY'S INVASIVE REMOVAL AND RESTORATION PROGRAM (*INFORMATIONAL)*

Presentation:
Dustin Harrison, Environmental Scientist

San Diego River Conservancy
Invasive Non-Native Plant Control and Removal Program

Watershed Wide Program

- Benefits outweigh the costs
- Primary activities
  - Mapping plant distribution
  - Mechanized & manual removal with subsequent herbicide treatment
- Permitting



2015/16 ANNUAL REPORT
And 2016/17 pre-notification
for USACE, USFWS and
San Diego RWQCB

ACOE Regional General Permit #41:
File No. SPL-2008-01079-MLM

&

USFWS Informal Consultation:
FWS-SDG-08B0219-09I0092

2015/16 ANNUAL REPORT
AND WORK PLAN

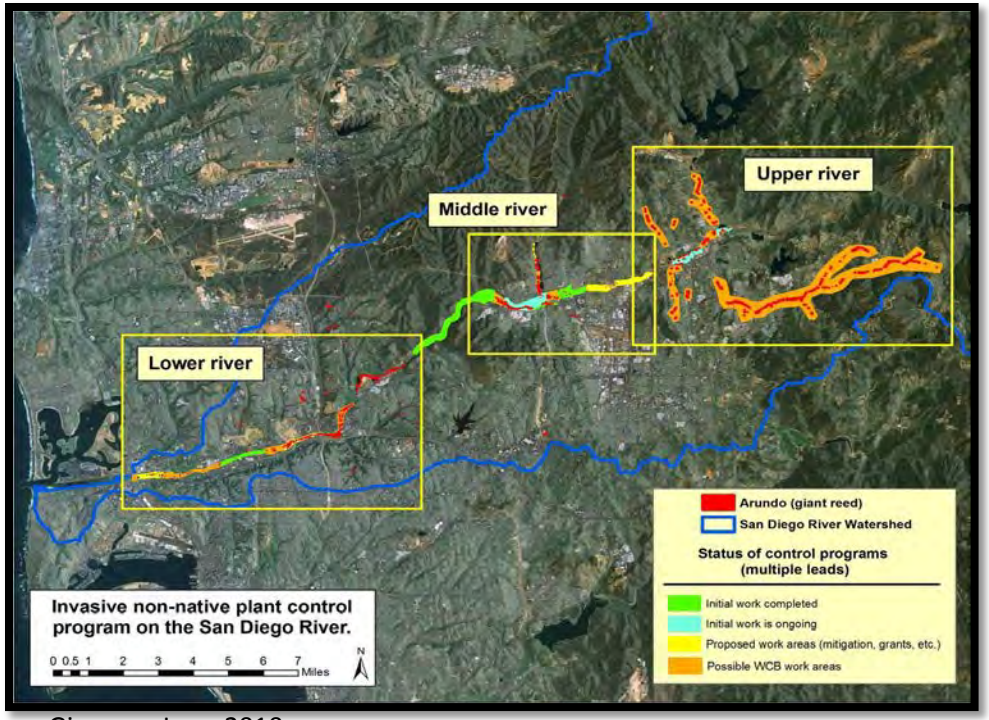
for the California Department of
Fish and Wildlife, Region 5

Streambed Alteration Agreement (1600):
1600-2009-0263-R5

San Diego River Watershed Invasive Non-native Plant
Control and Restoration Program

San Diego River Conservancy (SDRC)

Annual report to resource agencies.



Giessow, J. ca. 2010

2008 estimated 354 acres:

Giant reed (149 acres)
Salt cedar (96 acres)
Mexican fan palm & Canary Island palm (24.5 acres)
Brazilian & Peruvian pepper trees
Eucalyptus
Castor bean
Tree tobacco
Russian, Italian & artichoke thistle
Chinese elm
Fennel
Spanish & French broom
Himalayan black berry
Pampas grass (39 acres)
Purple loosestrife
Acacia spp.
Eupatory
Fountain grass
Water primrose

Estimated 350+ acres removed and controlled to date

Eupatory or crofton weed

Fountain grass

Environmental Impacts

- Direct Competition with native vegetation
  - Nutrients, sunlight and water (Phreatophyte), growth rate, better adapted (no natural predators*), allelopathic chemicals (salinity)

Tamarisk, also known as saltcedar.

Close-up of tamarisk leaves and flowers.

Table 4-4. Estimated water use by *Arundo*, replacement vegetation and net water savings from *Arundo* control.

Hydrologic Unit	Net *Arundo* Acreage	ESTIMATED WATER USE (Ac-ft/yr/ac)			
		***Arundo*: This study** (using 40mm)	***Arundo*: likely maximum** (using 20mm)	**Native vegetation** (using 3.3mm)	**Net gain from *Arundo* control** (using 16.7mm)
One acre of Arundo	*1*	*48*	*24*	*4*	*20*
Calleguas	229	10,983	5,487	905	4,582
Carlsbad	148	7,088	3,542	584	2,957
Los Angeles River	131	6,297	3,146	519	2,627
Otay	19	891	445	73	372
Penasquitos	24	1,129	564	93	471
Pueblo San Diego	15	719	359	59	300
Salinas	1,332	63,828	31,890	5,262	26,628
San Diego	149	7,164	3,579	591	2,989
San Dieguito	175	8,387	4,190	691	3,499
San Gabriel	44	2,124	1,061	175	886
San Juan	173	8,312	4,153	685	3,468
San Luis Rey	684	32,778	16,377	2,702	13,674
Santa Ana	2,534	121,442	60,675	10,011	50,664
Santa Clara	1,019	48,829	24,396	4,025	20,371
Santa Margarita	689	33,018	16,497	2,722	13,775
Santa Monica Bay	18	886	443	73	370
Southcoast	30	1,429	714	118	596
Sweetwater	42	2,002	1,000	165	835
Tijuana	131	6,261	3,128	516	2,612
Ventura	250	11,977	5,984	987	4,997
Other watersheds	28	1,359	679	112	567
TOTAL:	**7,864**	**376,948**	**188,333**	**31,075**	**157,258**

Cal IPC, 2011

Estimate Water Use

- **Arundo**

One acre uses:

5,013.78- 9,635.02 gallons in a day

Watershed wide Annually

If we remove all arundo within the watershed (149 acres)

2980 ac ft/ yr

- **Tamarisk**

One acre uses:

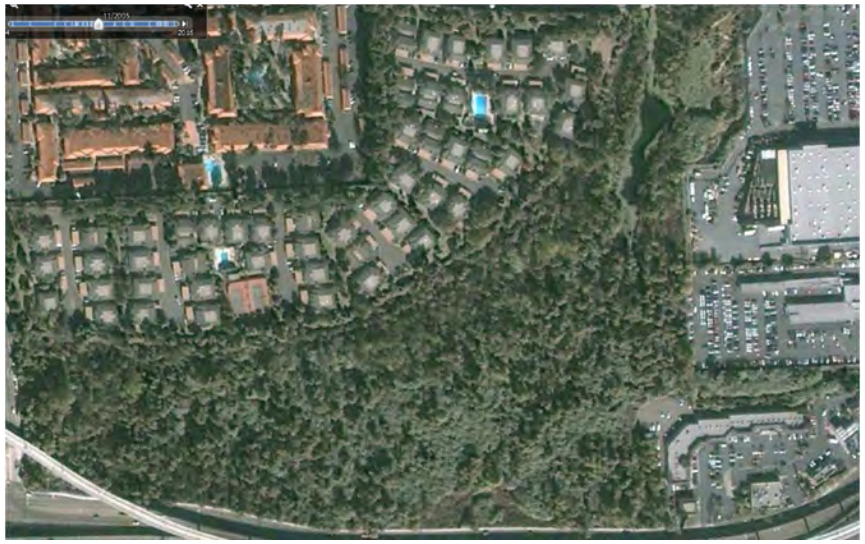
804.70 – 1,346.39 gallons in a day

Watershed wide Annually

If we remove all tamarisk within the watershed (96 acres)

643.2 ac ft/ yr

CA Dept. of Fish and Wildlife



Photos courtesy Jason Giessow, 2016 via Google Earth

Sycamore Creek (Santee)

Photos courtesy Jason Giessow, 2016 via Google Earth

Habitat Alteration

Human influences exacerbate fire & flood hazards

Burnt palm tree

- Homeless encampments
- Development within the floodplain/ floodway

Flooding at Sycamore Creek.

SDRC's Partners

San Diego Canyonlands - Rueda Canyon

San Diego River Park Foundation

Lakeside's River Park Conservancy – Los Coches

Tierra Data – Midwest TV

- San Diego River Park Foundation
- Lakeside River Park Conservancy
- California Department of Fish and Wildlife
- San Diego State University Research Foundation - SERG
- United States Forest Service
- Endangered Habitats Conservancy
- Back Country Land Trust

ACS Habitat Management

Sycamore Creek before and after

=>

=>

References

- Abichandani, S.L. 2007. The potential impact of the invasive species *Arundo donax* on water resources along the Santa Clara River: Seasonal and Diurnal Transpiration. M.S. Thesis, Environmental Health Sciences, University of California, Los Angeles.
- Cal-IPC. 2011. *Arundo donax* (giant reed): distribution and impact report.
- Iverson, M. 1993. The impact of *Arundo donax* on water resources. California Exotic Pest Plant Council, Berkeley, CA. 19-25.
- Motzer, T. et al. 2005. Stomatal conductance, transpiration and sap flow of tropical montane rain forest trees in the southern Ecuadorian Andes. Tree Physiology 25, 1283-1293.
- Nackley, L, et al. 2014. *Arundo donax* water use and photosynthetic responses to drought and elevated CO_2. Agricultural water Management Vol. 136 Pg. 13-22.
- Owens, M.K. & Moore, G.W. (2007) Saltcedar water use: realistic and unrealistic expectations. *Rangeland Ecology and Management, 60, 553-557.*
- Watts, D. 2009. Dynamics of water use and responses to herbivory in the invasive reed, *Arundo donax* (L.). M.S. Thesis, Rangeland Ecology and Management
- Zavaleta, E. 2000. The economic value of controlling an invasive shrub. Ambio Vol. 29 No. 8.

State of California
San Diego River Conservancy

Meeting of July 14, 2016

ITEM: **9**

SUBJECT: EXECUTIVE OFFICER'S REPORT (*INFORMATIONAL / ACTION)*

The following topics may be included in the Executive Officer's Report. The Board may take action regarding any of them*:*

- Proposed 2017 Board Meeting dates:
  (January 12, March 9, May 11, July 13, September 14, November 9)
- Council of Water Utilities meeting (San Diego County)
- San Diego River Trail - Flume Trail Extension
- All Conservancy Meeting

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File No. 60076.00001

July 7, 2016

Julia L. Richards, Executive Officer
San Diego River Conservancy
1350 Front Street, Suite 3024
San Diego, California 92101

Re: Helix Water District's Surplus El Monte Valley Parcels
APN's 392-060-29; 391-061-01; and 390-040-51

Dear Ms. Richards:

On August 21, 2015, Helix Water District ("District") executed letter of acceptance of your interest in purchasing surplus property pursuant to Government Code section 54220 *et seq.* The negotiation period ran for 180 days, through February 18, 2016. An additional 90-day extension was granted and is to end July 30, 2016. This is to inform you that the District has agreed to your extension. You have asked for an additional 180-day extension, which is granted to start July 30, 2016 and end January 26, 2017. During the extension of the negotiation period, the property will not be sold or transferred to any other person or party.

Should you have any questions regarding this matter, please contact the undersigned at your convenience.

Very truly yours,

Bruce W. Beach

Bruce W. Beach
of BEST BEST & KRIEGER LLP

BWB:wjr

cc: Carlos Lugo, General Manager
Steve L. Geitz, SR/WA

SAN DIEGO WATER BOARD

June 2016

LOWER POLLUTANT CONCENTRATIONS FOUND IN SAN DIEGO RIVER FISH

Are ecosystems healthy

Is it safe to swim

ARE FISH AND SHELLFISH SAFE TO EAT

Is water safe to drink

BIOACCUMULATION HARMS FISH, SHELLFISH, AND HUMANS

Fish and shellfish are nutritious and good for you to eat. But some fish and shellfish may take in toxic chemicals from the water they live in and the food they eat. Some of these chemicals build up in the fish and shellfish - and in the humans that eat fish and shellfish - over time. This process is called bioaccumulation. Monitoring for bioaccumulation helps determine whether fish and shellfish are healthy and safe to eat.

THE SAN DIEGO RIVER IS A PRIORITY

Fishing is common throughout the San Diego River, but its fish are exposed to pollutants from urban, industrial, and rural areas. The San Diego Water Board and partners recently sampled fish tissues from the river to assess current conditions and trends to historic monitoring.

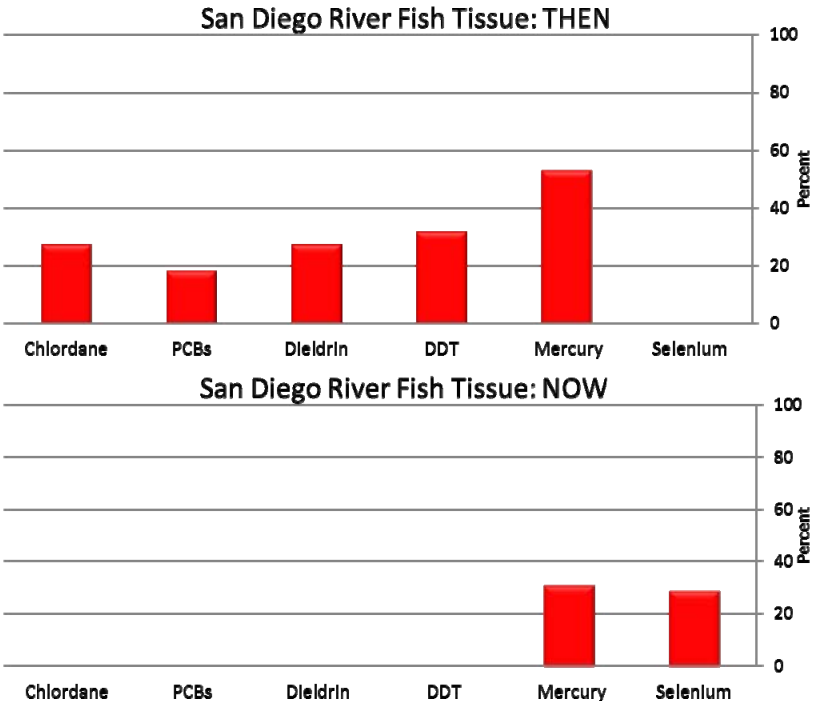

Figure 1. The percentage of tissue samples with concentrations above human health screening criteria has dropped (improved) for all pollutants except selenium.

Sampling bullhead catfish in the San Diego River with the California Department of Fish and Wildlife

CONDITIONS HAVE IMPROVED

Sampling results from 2013-2015 indicate that conditions in the San Diego River have improved (Figure 1). Pollutants such as DDT, PCBs, Chlordane, and Dieldrin were present at elevated levels in surveys from 1979-1999. These pollutants are currently banned from use in California and are no longer being detected or are found at extremely low levels in fish species sampled in the river.

MERCURY IS STILL A PROBLEM

Results show that there is still a cause for concern because of elevated levels of mercury. However, fewer recent samples had high mercury concentrations and those that did were mostly limited to a single species of fish. Selenium was also found to be elevated in some fish from historic sand and gravel mining ponds.

CONTACTS:
Chad Loflen, Senior Environmental Scientist
chad.loflen@waterboards.ca.gov

PROJECT PARTNERS:

SWAMP Surface Water Ambient Monitoring Program

California Department of Fish and Wildlife

California Water Quality Monitoring Council

San Diego State University 1897

MERCURY IS A PROBLEM IN LARGEMOUTH BASS

Largemouth bass had the highest level of mercury in the river, with the largest fish containing the highest levels of mercury. Bluegill, green sunfish, and black crappie had the lowest levels of mercury and thus pose the least risk to eat (Figure 2).

LARGEMOUTH BASS ARE A TOP PREDATOR

Mercury is a toxic, global contaminant that threatens ecosystem and human health. Mercury enters the environment in complex ways, including from atmospheric deposition and historic mining practices. As a top predator, largemouth bass contain the most mercury. This is not surprising because top predators often contain the most pollution due to age, size, and a process called biomagnification.

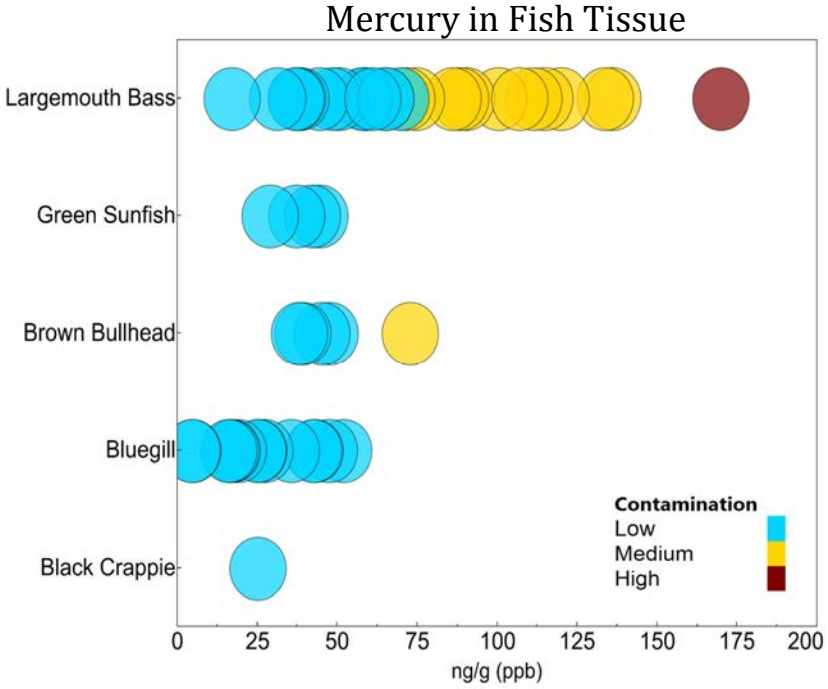

Figure 2. Concentrations of total mercury in individual fish collected from 2013-2015, with relative consumption risk indicated by color.

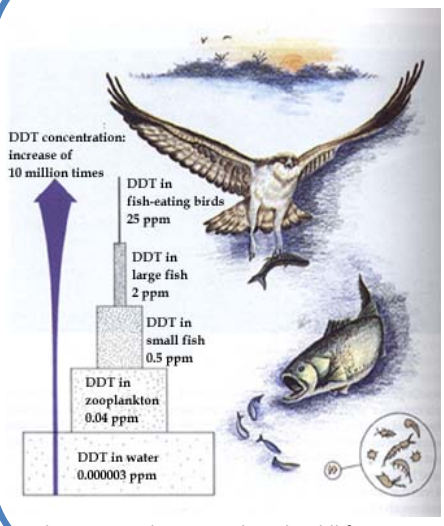

Photo: United States Fish and Wildlife Service

BIOMAGNIFICATION

Biomagnification is the process where tissue concentrations of a contaminant increase as it passes up the food chain through two or more trophic levels. While levels in the lower food web may be minimal, biomagnification can result in high concentrations in larger predator species such as birds and humans.

One example of biomagnification comes from the use of DDT, a synthetic pesticide banned in the United States in 1972. Biomagnification of DDT up the food chain resulted in magnified levels in fish-eating birds, such as the California brown pelican. Many bird populations suffered from liver tumors and failed reproduction due to embryo toxicity and eggshell thinning. For more information, see:http://www.fws.gov/home/feature/2009/pdfbrown_pelicanfactsheet09.pdf

WHAT'S NEXT?

The San Diego Water Board will produce a report in 2016 summarizing the complete sampling results. Additional sampling of the historic mining ponds may occur to confirm the level of health risk associated with selenium. Additional historic data from sites in lower portions of the river may be revisited. Data will be submitted to the State of California Office of Environmental Health Hazard Assessment, the agency responsible for developing formal fish and shellfish consumption advisories and guidelines.

References

Klasing S., Brodberg R. 2008. Development of fish contaminant goals and advisory tissue levels for common contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene. State of California Pesticide and Environmental Toxicology Branch, Office of Environmental Health Hazard Assessment, California Environmental Protection Agency.

State of California
San Diego River Conservancy

Meeting of July 14, 2016

ITEM: **10**

SUBJECT: **NEXT MEETING**

The next scheduled Board Meeting will be held Thursday, September 8, 2016, 2:00-4:00 p.m.

State of California
San Diego River Conservancy

Meeting of July 14, 2016

ITEM: **11**

SUBJECT: **ADJOURNMENT**