

MEMORANDUM OF UNDERSTANDING BETWEEN SAN DIEGO RIVER CONSERVANCY, SAN DIEGO STATE UNIVERSITY AND SAN DIEGO STATE UNIVERSITY RESEARCH FOUNDATION

Parties to the Agreement: This Memorandum of Understanding (MOU), made and entered into on Oct 11, 2023, 2023, by and between the San Diego River Conservancy (SDRC), San Diego State University (SDSU) and San Diego State University Research Foundation (SDSURF).

RECITALS

WHEREAS, SDRC, SDSU, and SDSURF seek to improve the health of the San Diego River as well as share an appreciation and understanding of its remarkable historical, cultural, natural, and recreational attributes; and,

WHEREAS, SDRC's statutory mission is to conserve land and protect native species within the San Diego River watershed, provide recreational opportunities, open space, wetlands, wildlife habitats, species restoration, and protection, in addition to improving the water quality of the San Diego River.

WHEREAS, under the San Diego River Conservancy Act, which makes its public policy to restore and protect river corridors from the headwaters near its mouth at the Pacific Ocean; and,

WHEREAS, SDRC's service areas include the San Diego River, Sweetwater River, Otay River, and the Tijuana River watersheds.

WHEREAS, the Governing Board Members for SDRC has adopted a Five-Year Strategic Plan Update that established 6 program areas focused on the following:

- Land conservation,
- Recreation and education,
- Natural resources,
- Cultural, tribal and historical resources,
- Water quality and natural flood conveyance, and
- Public outreach and capacity building

WHEREAS, SDSU is located within the watershed of the San Diego River, and its mission is to provide well-balanced, high-quality education for undergraduate and graduate students while contributing to the knowledge and solutions of problems through excellence and distinction in teaching, research, and service. This education shall extend to:

- Diverse cultural legacies,
- Accomplishments in many areas, such as the arts and technology,
- The advancement of human thought, including philosophy and science,
- The development of economic, political, and social institutions and

- The physical and biological evolution of humans and their environment.

WHEREAS, SDSU has a Field Stations Program, whose mission is to support teaching, research and education on the ecosystems of southern California by collecting, sharing and understanding environmental data. In keeping with this mission, the field stations are managed for long-term preservation of native fauna and flora. Additionally, other SDSU departments may be included to maximize the best outcome for all of the Parties. These departments and specialized units include, but are not limited to: American Indian Studies, Anthropology, Bioengineering, Coastal and Marine Institute, Chemistry and Biochemistry, Civil, Construction and Environmental Engineering, Ecology, Environmental Sciences, Geography, Geological Sciences, Microbiology, Public Health, Regulatory Affairs, Soil Ecology and Restoration Group Urban Studies and Watershed Science Institute.

NOW THEREFORE BE IT RESOLVED THAT subject to the recitations above, SDRC, SDSU and SDSURF agree as follows:

PROJECT GOALS AND OBJECTIVES

It is agreed and understood that the purpose of this MOU is to set forth the general terms and conditions acceptable to the Parties hereto for a partnership between SDRC, SDSU, and SDSURF. This partnership will evolve around an interdisciplinary framework that will engage SDSU and SDSURF directly in implementing SDRC's Five-Year Strategic Plan and ensure that students and faculty will become involved in the analysis and solution of problems confronting local river watersheds. The initial focus of this partnership will include, but not be limited to, the following programmatic categories and opportunities.

Education and Research

SDRC's Strategic Plan establishes land conservation as a major program in all reaches of the San Diego River. SDSU's environmental engineering and water resources program form the Blue Gold Area of Excellence. SDRC shall analyze the Blue Gold research objectives and curriculum requirements to determine whether SDRC's acquisition program could accomplish any of SDSU's and SDSURF's long-term goals.

OneWater Center

The OneWater Center at SDSU Mission Valley supports hands-on teaching, research, and education activities related to:

1. The protection and restoration of San Diego's rivers and watersheds.
2. The development of water technologies to conserve, protect, and augment water supplies in water-scarce regions.
3. Promoting environmental justice to make clean water and safe watersheds accessible to all.

This initiative prioritizes multi-benefit solutions, public health, and environmental resilience.

StreamSense

The StreamSense pilot project will collect and report real-time water quality and flow data in Alvarado Creek, a tributary of the San Diego River, during wet and dry weather. The first StreamSense platform will be/was deployed in Alvarado Creek on SDSU property and will provide real-time, high-frequency data housed on a public-facing portal using the WQDataLive system. Based on the performance of the StreamSense pilot project, future research includes:

1. Developing a warning system for flash flood conditions.
2. Evaluating changes in response to short-term and long-term disturbance in the watershed.
3. Installing a companion sensor platform at SDSU Mission Valley.

Partnerships will collaborate to create a high-speed wireless sensor network throughout the San Diego River watershed. These sensors will assist in collecting short and long-term data for monitoring water quality, flooding, and ecosystem change. SDSU will support this vision by leading the development of the largest wireless watershed in the Nation, dedicated to collecting, understanding, and sharing environmental information.

Removal of Invasive Species

SDRC has mapped invasive species in the San Diego River watershed and in 2009 established an invasive plant removal and control program. Joint restoration, hydrology, and water quality monitoring activities along Alvarado Creek serve in several areas on and near SDSU's campus. SDSU, SDSURF and the Soil and Ecology Restoration Group plays a critical role in implementing the SDRC program through several projects to remove invasive non-native plants and restore native habitat in Alvarado Creek, a tributary to the San Diego River in the City of San Diego.

Liaison with the Native American community

SDRC has also identified various projects requiring collaboration and consultation with Tribal Nations. Cultural awareness of the history and treatment is critical to addressing the educational, cultural and outreach programs in the SDRC's Strategic Plan. SDSU will support SDRC and its programs with local Tribal communities and organizations to assist in fostering support in a mutually beneficial and culturally sensitive manner.

Hydrology and Flood Conveyance

SDRC has proposed the completion of a hydrologic assessment of the watershed. While the US Bureau of Reclamation could be the lead of this initiative, SDSU should play a critical role at a minimum of advisory, if not the project manager.

Fire Impacts on urban streams

SDSU will play a critical role in studying the impacts of urban brush fires, failing sewer infrastructure, trash and debris pollution, and drought on water quality and quantity as it relates to impacts on human health and the environment with an emphasis on prevention, mitigation, treatment, and remediation.

Multidisciplinary Research and Teaching Programs

Particular attention shall be placed on a program of applied research and instruction, focusing on the problems urbanization has placed on the San Diego River and its watershed. Moreover, the River's geography and abundant archeological, cultural, tribal, and historical resources present rare opportunities to develop unique multidisciplinary research and teaching programs.

INTENT TO COOPERATE

It is the intention of the Parties under this MOU to cooperate as follows:

- Provide formal meetings and informal consultations regularly to discuss and agree on a course of action for any projects the partnership may pursue.
- Provide for entering into agreements when projects shall be in whole or part from funds or resources provided by either SDRC or SDSU.

PROJECT GRANT AGREEMENTS

When a project will be financed in whole or part from funds or resources provided by SDRC, the Parties shall enter into a grant agreement, which sets forth the performance requirements and financial obligations. Grant agreements shall be supplemental to this MOU and subject to the terms and conditions contained herein.

1. Any grant agreement shall be entered into prior to beginning of the work.
2. The grant agreement shall include the following:
 - a. Scope of work to be performed
 - b. If appropriate, plans and specifications for the project
 - c. Schedule of work with the responsible parties identified
 - d. Budget estimate for work to be performed
 - e. Fully executed grant agreement

ADDITIONAL TERMS AND CONDITIONS

SDRC, SDSU and SDSURF mutually agree and understand the following:

Funding from the Budget Act

The Parties to this MOU understand that funding each year is contingent upon appropriation of sufficient funds. If enough funding is not provided or substantially reduced, additional supplemental grant agreements may be paused until funding is available.

Participation in Similar Activities – Non-exclusivity

This MOU and subsequent grant agreements do not restrict SDRC, SDSU, and/or SDSURF from participating in similar activities with other public or private agencies, organizations, or individuals or from pursuing other projects or activities.

Commencement/Expiration/Termination

This MOU takes effect upon the signature of the authorized representatives of SDRC, SDSU, and SDSURF. It shall remain in effect for five (5) years from the date of execution. This MOU may be extended for an additional five (5) years or updated to include additional terms provided that there is a mutual agreement and subsequent written concurrence. SDRC, SDSU, and SDSURF may terminate this MOU by giving the other Parties a sixty (60) day written notice.

Responsibilities of the Parties.

SDRC, SDSU, and SDSURF and their respective agencies and officers will be responsible for coordinating their activities in pursuing the objectives identified in this MOU. By signing this document, each Party represents that it will carry out its separate activities in good faith and in a coordinated and mutually beneficial manner.

Annual Meetings

SDRC, SDSU, and SDSURF shall meet at least once yearly to review matters covered by this MOU and agree on actions to implement the envisioned projects. It is also the intent of the Parties to arrange for meetings or communication with their representatives to reach prompt agreement on all matters of mutual concern covered by this MOU. The Executive Officer of SDRC and the Director of the Field Station Programs for SDSU shall be responsible for making the arrangements for formal meetings and continuing consultation.

Applicability – Existing laws and regulations

Where applicable, any contract, grant agreement or understanding entered into pursuant to this MOU for work to be performed shall include the requirements of the appropriate Federal, State and local laws, ordinances and regulations.

Authority to Execute

Each Party to this MOU represents and warrants that the person who has signed the MOU is authorized to bind their organization to the terms and conditions set forth.

Entire Agreement

This MOU contains the entire agreement of the Parties, and no representation, provision, warranty, term, condition, promise, duty or liability, expressed or implied, shall be binding upon or applied to any of the Parties, except as herein stated. No amendment or modification of any term, provision or condition of this MOU shall be binding or enforceable unless in writing and signed by each of the Parties.

IN WITNESS WHEREOF, the Parties have executed this MOU as of the date hereof.

San Diego River Conservancy

San Diego State University

Julia Richards

Julia Richards
Executive Officer

Hala Madanat

Hala Madanat (Oct 4, 2023 08:38 PDT)

Dr. Hala Madanat
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