



Quarterly Progress Report

Reporting Period: April 1st to June 30th, 2016

July 30th, 2016

Table of Contents

Project Purpose	2
Section I: Proposal Progress	2
Major Accomplishment 1:	2
Major Accomplishment 2:	3
Major Accomplishment 3:	3
Additional Accomplishments	3
Commercialization / Partnering	3
Intellectual Property	4
Programmatic & Project Changes	4
Looking Forward	4
Section II: Performance	5
Table 2: Progress Toward Metrics.....	5
Project Scorecard Narrative	6
Section III: Budget	7
Section V: Appendix	7
Appendix 1 – Sales Pipeline.....	7

Project Purpose

WaterStart aims to make Nevada a global water innovation hub and portal for investment by leveraging the state's leadership and expertise in water. The WaterStart business model involves a joint venture between academic, public, and private sectors. Each partner brings critical resources to create a mechanism to accelerate the economic cycle through applied research. These resources will lead to technology commercialization that will bring high-value, shared services to a broad range of public and private sector clients as well as an advanced workforce with core technology skills and domain expertise to meet employers' needs and attract technology-focused companies to Nevada. At the same time the WaterStart's efforts will enhance Nevada System of Higher Education's goal of strengthening public private partnerships to generate additional sources of nonfederal grants and contracts. By combining the domain expertise of the NSHE institutions, SNWA, and the LVGEA, WaterStart will:

- Act as a portal for attracting, partnering with, and servicing national and international business in the water domain.
- Deliver high-value, shared services to public and private sector clients while building job skills and assisting DETR to grow Nevada's future workforce.
- Assist with commercializing and distributing the collective domain expertise in water sciences, technology, and management areas with NSHE & Water Utility Partners (SNWA, TMWA, etc).
- Provide additional sources of grants and contracts to NSHE faculty members

Section I: Proposal Progress

During the reporting quarter, WaterStart has made significant progress toward meeting proposed metrics. Major accomplishments for the current reporting period include:

Major Accomplishment 1:

Initiated Projects with Three Companies – WaterStart initiated projects with 3 companies, Ionex, Well To Do and Rein Drop.

Ionex- As described in previous reports, Ionex is a UK-based water treatment company that has developed solutions for treating nitrates and hexavalent chromium. Their proprietary treatment process for capturing contaminants reduces waste-disposal volumes and operational costs compared to traditional systems. Ionex, at no cost to WaterStart or its partners, has installed their nitrate treatment technology, which is a technology priority of SNWA (on behalf of the Las Vegas Valley Water District), at a problematic well-site with high nitrate concentrations and is already yielding positive results. In return for the pilot opportunity, Ionex has begun establishing a Nevada-based office to further develop the control and communications software associated with their technology. The projected return-on-investment for Nevada is \$500,000 per year for 3 years.

Well To Do- Well To Do is an Israeli startup also focusing on treatment of nitrates. Well To Do was awarded a \$100,000 grant from the commercialization fund, with \$50,000 to be matched by SNWA, to install a pilot project at a well site within SNWA/LVVWD's distribution system. The benefit of Well To Do's technology is the removal of nitrate without generating any waste residuals. In coordination with SNWA and LVVWD, WaterStart hosted a groundbreaking ceremony and project kick off meeting in late June. Participation in the event included representatives from SNWA, LVVWD, WaterStart, Well To Do, Corona Environmental Consulting, LVGEA, and the U.S. Department of Commerce. In return for the grant award, Well To Do has agreed to invest \$500,000 back into Nevada within 5 years. This

investment shall include salaries and/or purchase of products and services from Nevada-based businesses.

Reindrop- Reindrop is a small Nevada-based business developing a water metering device to be installed at the irrigation manifold that “learns” water flow and pressures from each irrigation station. If an anomaly is detected, the sprinkler head or malfunctioning drip system will shut off and send a report via a smart phone app. WaterStart has agreed to fund UNLV faculty to develop the first prototype and associated firmware for this technology. WaterStart and Reindrop are negotiating a shared licensing agreement in return for the grant award.

Major Accomplishment 2:

Round 4 Commercialization Fund Request for Proposals – The fourth open request for proposals issued by GOED and WaterStart closed on July 1st. Fifty-one responses to the RFP were submitted by 43 companies interested in working with WaterStart. Several companies submitted multiple proposals targeting different technical priorities. This fourth round addressed the technology needs of MGM and TMWA. These proposals will be evaluated by committees representing GOED, WaterStart, and WaterStart’s partners, such as MGM, TMWA, DRI, UNR, and SNWA.

Major Accomplishment 3:

National, Regional and Statewide Media Coverage – In April, WaterStart made large strides to increase awareness and recognition with the newly rebranded organization. POLITICO Magazine (a political-journalism organization) published an in-depth feature article on WaterStart titled “Las Vegas is Betting it can become the Silicon Valley of Water.” The nationally published article highlighted the efforts of the Governor’s Office of Economic Development, the Southern Nevada Water Authority and the state’s efforts to develop an innovation ecosystem in Nevada around water. Since its publication, WaterStart has been featured on NPR’s On Point with Tom Ashbrook, CCTV America and various Nevada print media and television news outlets. The estimated circulation reach from this media coverage is 44.5 million.

Additional Accomplishments

Pathogen detection priorities – Over the course of the RFP processes, several proposals related to pathogen detection have been submitted for consideration. These technologies generally present a challenge for our partners because they need to complete the EPA approval process, which is lengthy and expensive. At SNWA’s urging, a pathogen detection review committee convened during Q2 to review several of these proposed technologies. Two companies were identified as an interest to SNWA. In addition, the committee, consisting of representatives of SNWA’s water treatment facility and research lab, UNLV, and DRI, identified a list of technology priorities in the area of pathogen detection. These priorities are included in Round 5 of the RFP process.

Commercialization / Partnering

WaterStart has worked closely alongside our partner at Winnemucca Farms (Water Asset Management) in finalizing their technology priority list and has made significant progress in building a

relationship with the Nevada Mining Association. Although not a formal partner yet, the Nevada Mining Association has also provided a list of technology priorities for which they are seeking WaterStart's assistance in finding solutions.

Intellectual Property

NA

Programmatic & Project Changes

NA


Looking Forward

In the third Quarter of 2016, WaterStart is expecting to accomplish the following:

- WaterStart will be participating as an exhibitor during Singapore International Water Week (SIWW) in July. SIWW is one of the largest gathering of buyers and sellers of innovative water technologies. WaterStart, as the Nevada Center of Excellence, debuted at SIWW two years ago. WaterStart's objective while at SIWW is to connect with international utilities, large multi-national companies, and tech companies from the Asia-Pacific region interested in breaking into the U.S. market.
- WaterStart will also be participating in the Governor's trade mission to Australia during the third quarter. Because of the climate similarities, as well as a large agriculture and mining industry, Australia boasts technologies that could provide solutions to the southwestern U.S. WaterStart's objective during the trade mission is to connect with these tech companies and to foster relationships with these industries.
- Round 5 of the RFP process will be opened to solicit proposals from potential leads gathered while in Singapore and Australia.
- A significant amount of time during the second quarter was spent preparing for SIWW and the trade mission whereas it is expected that the majority of the third quarter will be focusing on identifying projects with our partners as a result of Round 4 of the RFP process as well as following up with new leads generated from SIWW and the trade mission.

Section II: Performance

Table 2: Progress Toward Metrics



WaterStart Progress Dashboard

Metrics as defined by Knowledge Fund	Current Status/Target Status			
	Actual Q2 2016	YTD	Estimated By June 30, 2016	Estimated By June 30, 2017
Companies Moved to Nevada	2*	6*	10	15
Start-up Companies	-		-	-
Jobs Created	1	7	90	180
IP Licenses	1	1	-	-
IP Revenue	-		-	-
Grants Received	-		\$530,000	\$890,000
Sponsored Research:				
# of Contracts	-	2		
Total \$ Committed	-	\$100,000	\$210,000	\$250,000
Matching Funds	\$50,000	\$105,000		
Patents:				
Filed				
Awarded			4	6
Students placed with Companies	-	1		
Faculty Hired	3	3	4	2
Gift/Donation/Membership	\$35,000	\$200,000	\$725,000	\$1.025M
Student Internships	-	1		

Notes: *Project has been initiated and agreement is in place with company committed to moving to Nevada.

Project Scorecard Narrative

Companies Moved to Nevada: Projects have been initiated and agreements signed with two companies - Ionex and Well To Do

YTD includes: Ayyeka, Outlocks, Syrinix, Intelligent Modelling, Ionex and Well To Do

Note error in Q1 report. YTD should have reported 4.

Start-up Companies:

Jobs Created: 1 new job was created by Water Shark Systems in Q2.

A row under this metric titled Jobs Projected will be added as part of the 2nd year of reporting under this grant award. A projected versus actual metric better reflects the successful efforts of WaterStart.

IP Licenses: WaterStart (and UNLV through WaterStart) will receive a percentage of revenue generated from licensing, leasing and/or selling of the Reindrop technology.

IP Revenue:

Grants Received:

Sponsored Research: 50K in matching funds from SNWA to support WTD

YTD includes: \$20K from SNWA to support Ayyeka
\$15K from SNWA to support Outlocks
\$20K from SNWA to support Syrinix

Patents:

Students Placed with Companies:

Impact Faculty Hired: 3 Faculty at UNLV have been funded by WaterStart to support the Rein-Drops project: an electrical engineer, and undergrad student, and a computer programmer

Gifts/Donations: \$35K membership dues from SNWA

YTD includes: \$50K from tech companies WaterSharks and Echologics
\$25K from TMWA
\$50K from MGM
\$40K from WAM

Student Internships:

Section III: Budget

In the second quarter of 2016, the fourth quarter of the Phase 2 grant from the Knowledge Fund, the total expenses of the Water Center of Excellence(WaterStart) were over the projected quarterly budget. Total Salary & Benefits expenses were under the projected amount due to the loss of the admin position. Other expenses were significantly over budget as additional funds were spent on International Representation ahead of the Trade Mission to Australia in July, 2016. The Commercialization Fund was also over budget due to additional projects funded. In total, WaterStart is over budget for this quarter by \$41,715.00.

WaterStart Expenses			
For Reporting Period			
April. 1 – June 30, 2016			
	Q2 Actuals	Q2 Budget	Year to Date Jul 1,2015- June 30, 2016
Total Salary & Benefits	\$ 101,822.00	\$ 134,000.00	\$ 406,739.59
Operating Expenses	\$ 34,593.00	\$ 33,500.00	\$ 133,642.81
Other Expenses	\$ 44,000.00	\$ 30,000.00	\$ 88,575.65
Commercialization Fund	\$ 148,800.00	\$ 100,000.00	\$ 278,650.71
Total	\$ 329,215.00	\$ 287,500.00	\$ 907,598.76

In the second quarter of 2016, the fourth quarter of the Phase 2 grant from the Knowledge Fund, the total income of the Water Center of Excellence was under budget.

WaterStart Income			
For Reporting Period			
April 1 – June 30, 2016			
	Actuals	Budget	Year to Date Jul 1,2015- June 30, 2016
Grants / Contracts*	\$ 0	\$ 162,580.00	\$ 131,080.00
Gifts	\$	\$	\$ -
Cont. ED/ Outreach	\$	\$	\$ -
Other Contributions*	\$	\$ 43,750.00	\$ 195,000.00
Knowledge Fund	\$ 329,215.00	\$ 287,500.00	\$ 952,388.91
Total	\$ 329,215.00	\$ 493,830.00	\$ 1,278,468.91

Section V: Appendix

Appendix 1 – Sales Pipeline

See Attached table for current sales pipeline