



Quarterly Progress Report

Reporting Period: July 1st to September 30th, 2016

October 30th, 2016

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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

Major accomplishments for the current reporting period include:

Major Accomplishment 1:

Attended Singapore International Water Week (SIWW)– A delegation of 8 people, which included WaterStart staff, members of the Board, and staff from WaterStart's partners (GOED, SNWA, and LVGEA), represented WaterStart at the biennial SIWW in July, 2016. Debuting as the Nevada Center of Excellence two years ago, the objective of WaterStart's 2016 participation as an exhibitor was to connect with international utilities, large multi-national companies, and technology companies from the Asia-Pacific region interested in breaking into the U.S. market. Significant outcomes from SIWW included:

- Interacting with almost 70 different companies
- Hosting 16 formal meetings with a variety of technology companies interested in WaterStart
- Hosting 5 meetings with large corporations
- Hosting 6 meetings with other agency/utilities regarding partnership opportunities
- Sponsoring and speaking at the TechXchange in partnership with Isle Utilities
- A poster presentation by DRI/WaterStart staff
- Seven promising leads as solutions for the technology priorities identified by WaterStart's partners and/or as having significant interest in establishing an office in Nevada

Of the 7 promising leads, two projects are currently being scoped and negotiated-

MetaWater – MetaWater is a large company based in Japan that specializes in ozone systems and ceramic membrane filtration systems for drinking water applications, as well as developing additional

technologies for wastewater and water reuse applications. MetaWater, with U.S. offices already in New Jersey and Illinois, has significant interest in establishing a Nevada-based office to further collaborate with SNWA on development of a bromate sensor and with UNLV/SNWA on development of a cryptosporidium sensor, both of which are technology needs of SNWA.

Riventa – Based in the UK, Riventa has developed an application for maximizing pump efficiencies in the drinking and wastewater sectors. Riventa visited SNWA/LVVWD in September and successfully completed an initial demonstration of technology.

Major Accomplishment 2:

Participated in the Governor’s Trade Mission to Australia – As part of the trade mission to Australia, WaterStart participated in over 20 business-to-business meetings and 2 potential agency partnership meetings, identifying 9 promising leads with technology companies and 3 academic leads. Of the 9 promising leads with technology companies, two projects are currently being scoped and negotiated:

RedEye – Based in Australia, RedEye offers a cloud based solution for managing engineering drawings and blue prints. RedEye is capable of organizing and digitizing all types of drawings and data for utilities, municipalities, engineering firms, etc. This company provides a direct solution to a technology need identified by SNWA but that WaterStart had yet to facilitate. Since the trade mission, Red Eye, through WaterStart, has been introduced to SNWA and the Las Vegas Valley Water District, the Clark County Regional Flood Control District, the Truckee Meadows Water Authority, City of Henderson, LVGEA and GOED.

STAR Water Solutions – Also based in Australia, STAR Water designs and supplies custom bio-filtration media for stormwater, industrial/agriculture runoff and groundwater reuse applications. Through WaterStart, STAR Water and DRI are currently negotiating a collaborative partnership to characterize locally available materials in Nevada, identify material performance efficacy, and establish manufacturing and distribution channels within Nevada for the development of recycled and sustainably procured bio-filters.

Major Accomplishment 3:

Identified Projects from Round 4 of the RFP Process – Over 50 responses were received during Round 4 of the RFP process. During Q3, the proposals were reviewed by multiple committees made up of representatives of WaterStart and its partners including SNWA, MGM, DRI, UNR, and TMWA. Additional follow up was requested by the committees for 14 of the proposals. Based upon the technologies described in the proposals and the additional details provided by the technology companies, the priorities and potential associated projects for MGM were further refined. One project with TMWA is currently being scoped and negotiated:

AdEdge and Carollo – AdEdge is a company based in Georgia that manufactures technology solutions for nitrate treatments. Carollo is a large engineering firm, with offices across the U.S. A collaborative pilot project for nitrate and arsenic treatment is currently being negotiated between both companies, TMWA, and WaterStart. This project is also expected to support UNR faculty.

Additional Accomplishments

- Initiated Round 5 of the Request for Proposal Process – Although still identifying projects from Round 4, WaterStart and GOED saw the potential for meeting innovative technology companies while in Singapore and Australia and immediately opened the 5th round of the RFP process. This call, which was the first call for addressing the technology priorities of all WaterStart’s formal and informal partners (drinking water, wastewater, mining, pathogen detection, commercial buildings and agriculture), for proposals was only open for 2 months but generated the most responses with 57 proposals.
- Israeli workshop – In collaboration with the Princeton Energy Group, an organization whose mission is to expand the reach of sustainable technologies in the marketplace through innovation, WaterStart hosted a workshop for Israeli technology companies looking to break into the U.S. market. Four Israeli technology companies, several investors, and representatives from SNWA, MGM, and Clark County Water Reclamation attended.

Commercialization / Partnering

Memorandum of Agreements – two MOUs were signed outlining the details for future collaborations and technology exchanges:

- The Environmental and Water Technology Centre of Innovation within Ngee Ann Polytechnic in Singapore focuses on developing technologies for environmental and water applications. Their mission is to partner with small to large organizations through applied research, development, and consultancy projects and to translate those ideas into practical solutions.
- Spread is a Japanese company providing environmentally sustainable vertical farming solutions, currently specializing in high-end lettuce products. Spread is interested in building long-term collaborations to strengthen their research capabilities, enhance faculty expertise, and provide educational opportunities for NSHE students while benefitting their commercial interests in Nevada.

Intellectual Property

NA

Programmatic & Project Changes

NA

Looking Forward

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

- Channels for Innovation Summit – In partnership with Isle Utilities and the Watersmart Innovations Conference, WaterStart will be hosting a summit for leaders and entrepreneurs in the water technology space.
- Finland – will be participating in a recruiting trip organized by Tekkes (the Finnish equivalent to GOED). GOED will also be participating in this opportunity.

- Closing deals and initiating projects – The fourth quarter will be focused on finalizing agreements and initiating projects with the below partners and technology companies:
 - MGM Resorts International– the goal is to have two installs underway with two technology companies
 - AdEdge/Carollo with TMWA
 - Riventa- deal has been closed with SNWA at time of this report submittal
 - RedEye- deal has been closed with SNWA at time of this report submittal
 - MetaWater with SNWA
 - STAR Water Solutions with DRI faculty
 - Round 5 – Two projects from Round 5 of the RFP process have been identified and prioritized, one will be supporting faculty at DRI.

Section II: Performance

Table 2: Progress Toward Metrics



waterstart
Progress Dashboard

Metrics as defined by the Knowledge Fund	Current Status			
	Actual Q3 2016	YTD (7/1/16-6/30/17) ^a	Actual from 7/1/15	Estimated by 6/30/17
Companies moved to Nevada	-	-	6 ^b	15
Start-up Companies	-	-	-	
Jobs Projected	-	-	29	180
Jobs Created	1	1	8	-
IP Licenses	-	-	1	-
IP Revenue	-	-	-	-
Grants Received	-	-	-	\$890,000
Sponsored Research:				
# of Contracts	-	-	2	-
Total \$ Committed	-	-	\$100,000	\$250,000
Matching Funds	-	-	\$105,000	
Patents:				
Filed	-	-		-
Awarded	-	-		6
Students placed with Companies	-	-	1	-
Faculty Hired	-	-	3	2
Gift/Donation/Memberships	-	-	\$200,000	\$1.025M
Student Internships	-	-	1	-

Notes:

a. Year-to-date reflects year of grant award (July 1-June 30). Currently in year 2 of grant award.

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

Project Scorecard Narrative

Companies Moved to Nevada:

Start-up Companies:

Jobs Projected:

Jobs Created: 1 new job was created by Water Shark Systems in Q3.

IP Licenses:

IP Revenue:

Grants Received:

Sponsored Research:

Patents:

Students Placed with Companies:

Impact Faculty Hired:

Gifts/Donations:

Student Internships:

Section III: Budget

In the third quarter of 2016, the fifth 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 by \$4,633.86. Total Salary & Benefits expenses were under the projected amount due to the loss of the full-time admin position. Operating Expenses were significantly under budget after over spending the in Q2. Other Expenses were over budget as additional funds were spent on International Representation in an effort to complete objectives with partners in Israel.. The Commercialization Fund was also over budget due to additional projects funded. Currently, WaterStart is \$2,242.62 over the projected Year-to-Date budgeted amount of \$1,177,500.00.

WaterStart Expenses			
For Reporting Period			
July 1 – Sept. 30, 2016			
	Q3 Actuals	Q2 Budget	Year to Date Jul 1,2015- June 30, 2016
Total Salary & Benefits	\$ 112,436.76	\$ 124,000.00	\$ 519,176.35
Operating Expenses	\$ 7,451.00	\$ 33,500.00	\$ 141,093.81
Other Expenses	\$ 10,000.00	\$ 0	\$ 98,575.65
Commercialization Fund	\$ 142,246.10	\$ 100,000.00	\$ 420,896.81
Total	\$ 262,133.86	\$ 257,500.00	\$ 1,179,742.62

In the third quarter of 2016, the fifth 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			
July 1 – Sept. 30, 2016			
	Actuals	Budget	Year to Date Jul 1,2015- Sept. 30, 2016
Grants / Contracts*	\$ 0	\$ 124,000.00	\$ 131,080.00
Gifts	\$	\$	\$ -
Cont. ED/ Outreach	\$	\$	\$ -
Other Contributions*	\$	\$ 31,250.00	\$ 195,000.00
Knowledge Fund	\$ 262,133.86	\$ 257,500.00	\$ 952,388.91
Total	\$ 262,133.86	\$ 412,750.00	\$ 1,278,468.91

Section V: Appendix

Appendix 1 – Sales Pipeline

See Attached table for current sales pipeline

