



Quarterly Progress Report

Reporting Period: October 1st to December 31st, 2016

January 30th, 2017

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Project Purpose

WaterStart is a cluster of global leaders in the implementation of water innovation and 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:

Initiated 4 projects among partners and NSHE faculty-

- 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. RedEye has agreed to immediately hire 2 full-time equivalent employees, based in Las Vegas, to support a scoping and establishment project with SNWA.
- 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 have negotiated 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. STAR Water has projected the creation of 32 jobs (in manufacturing, lab analyses, sales and marketing, distribution, and administration) over the next 5 years.
- 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 being initiated between both companies, TMWA, and WaterStart. This is the first project that WaterStart has initiated with TMWA. This project is projected to create 5-8 jobs from AdEdge and 4-10 jobs from Carollo within 5-years and will also be supporting UNR faculty.

- IMGeospatial – IMGeospatial, formerly known as Intelligent Modelling (for purposes of Knowledge Fund reporting and documentation), is a UK-based company that WaterStart has been supporting through the commercialization fund program and through WaterStart’s network of utility partners. IMGeospatial is currently piloting a flood prediction technology with SNWA. The Clark County Regional Flood Control District has supported this project by sharing extensive storm water drainage data. WaterStart has agreed to fund a student at DRI to process and evaluate this data to support the timely completion of the pilot project. Further, IMGeospatial has expanded their technologies to include a leak detection technology. SNWA/LVVWD has agreed to pilot this technology as well. IMGeospatial forecasts 10 jobs over 3-years with the first Las Vegas hire to start in Jan of Q1 2017.

Major Accomplishment 2:

Channels for Innovation Summit – In partnership with Isle Utilities and the WaterSmart Innovations Conference and Exposition, WaterStart hosted a summit for leaders and entrepreneurs in the water technology space. Panel discussions combined topics for both the adopter of new technologies as well as the developers of new technologies with panelists representing water utilities and industry and water technology firms that have successfully commercialized their technology in the water sector. Topics included technical challenges in water management, evaluating the return-on-investment, overcoming the challenges of adaptive business models, and perspectives from leading first adopters. Companies had the opportunity to pitch their technologies in a “Shark Tank”-style competition. The judging panel of industry experts presented awards for the “Most Commercial Potential” and “Most Innovation Technology.”

Major Accomplishment 3:

MOU with the Israeli Innovation Authority – After months of negotiation and stalled discussions, WaterStart with the support of its local Israeli partners, signed an MOU with the Israeli Innovation Authority. The Israeli Innovation Authority was formed to drive a new era of innovation by the Israeli government as an acknowledgement of the need for a central agency to manage knowledge and the advanced capabilities of technology innovation. The MOU between WaterStart and the Israeli Innovation Authority establishes the framework for joint funding of projects promoting technological innovation, research and development.

Additional Accomplishments

- Finland – WaterStart, along with staff from GOED, participated in a small recruiting trip to Finland organized by Tekkes (the Finnish equivalent of GOED). The group met with 13 technology companies with a wide range of technology offerings. A great deal of interest in participating in the next round of RFP was expressed and discussions around a similar MOU to the Israeli agreement is underway.
- Business H20/Israeli workshop – WaterStart participated in the Business H20 Summit, the first joint Israel/U.S. water conference organized by Ben-Gurion University of the Negev and the U.S. Chamber of Commerce. The summit brought together policy experts, entrepreneurs, business leaders, and investors to discuss best practices in water policy. WaterStart, along with Jewish Nevada and other community leaders, recognized the opportunity to introduce the

local Jewish community to the technology companies currently in WaterStart's portfolio. Representatives from Jewish Nevada, Israeli American Council and the Jewish National Fund attended a half-day workshop where technology companies shared details of their technology and business support needs. Approximately 40 people attended.

Commercialization / Partnering

see Major Accomplishment 3

Intellectual Property

NA

Programmatic & Project Changes

NA


Looking Forward

In the first Quarter of 2017, WaterStart is expecting to accomplish the following:

- Launching joint RFP with the Israeli Innovation Authority – Per the MOU, WaterStart and the Israeli Innovation Authority will be releasing a joint request-for-proposals. Selection of potential projects and opportunities with WaterStart's partners is expected to occur prior to the end of Q1.
- Closing deals – WaterStart is forecasting to close at least 3 pending projects with partners during Q1.
- Expansion of the WaterStart team – Companies that have received support from WaterStart and its partners during the previous year are beginning to wrap-up their pilot opportunities and are now seeking assistance in business development and further commercialization of their technology in the U.S. market. To support these activities, WaterStart began the application process for hiring a Business Development Administrator. A candidate is expected to be selected in Q1.
- Formalizing a Shared-Space plan - Companies that have received WaterStart support in the form of a grant and/or a project with a WaterStart partner are beginning to hire local staff in Nevada (per their agreement with WaterStart) and are seeking temporary office space during the pilot phase. In an effort to facilitate this need, WaterStart has been researching opportunities for a shared-space concept where personnel from the tech companies that WaterStart has supported can occupy/lease office space alongside WaterStart personnel.

Section II: Performance

Table 2: Progress Toward Metrics



waterstart
Progress Dashboard

Metrics as defined by the Knowledge Fund	Current Status			
	Actual Q4 2016	YTD (7/1/16-6/30/17) ^a	Actual from 7/1/15	Estimated by 6/30/17
Companies moved to Nevada	3	3	9 ^b	15
Start-up Companies	-	-	-	
Jobs Projected	50	50	79	180
Jobs Created	2	3	10	-
IP Licenses	-	-	1	-
IP Revenue	-	-	-	-
Grants Received	-	-	-	\$890,000
Sponsored Research:				
# of Contracts	-	-	2	-
Total \$ Committed	-	-	\$100,000	\$250,000
Matching Funds	\$420,000	\$420,000	\$525,000	
Patents:				
Filed	-	-		-
Awarded	-	-		6
Students placed with Companies	-	-	1	-
Faculty Hired	0	0	1	2
Faculty Projects	2	2	4	
Gift/Donation/Memberships	-	-	\$200,000	\$1.025M
Student Internships	2	2	4	-

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: Closed deals with RedEye, STAR Water Solutions, and AdEdge (in partnership with Carollo).

Start-up Companies:

Jobs Projected: 50 (32 from STAR Water Solutions and a combined total of 18 from AdEdge and Carollo) over 5 years

Jobs Created: 2 immediate hires from RedEye (+1 new job was created by Water Shark Systems in Q3 for YTD)

IP Licenses:

IP Revenue:

Grants Received:

Sponsored Research: A total of \$420,000 has been committed to Sponsored Research via Matching Funds (\$100,000 from SNWA for RedEye; \$300,000K from TMWA for AdEdge/Carollo; 20K SNWA for IMG)

Patents:

Students Placed with Companies:

Impact Faculty Hired: WaterStart hired an Executive Admin position

Faculty Projects: this metric has been added in order for WaterStart to track the number of projects funded through KF that is directly supporting faculty. For Q4 WaterStart funded two projects: Dr. Alan Hayvaert within DRI with STAR Water and the TMWA project with AdEdge/Carollo will also support UNR faculty. (Actual also includes Reindrop and AboveNV)

Gifts/Donations:

Student Internships: One student within DRI is supporting the completion of Phase 1 of the IMG project; A graduate student at UNR will be supporting the AdEdge/Carollo project. (Actual includes the WaterStart summer hire and the undergrad for the Reindrop projects).

Section III: Budget

In the fourth quarter of 2016, the sixth quarter of the Phase 2 grant from the Knowledge Fund, the total expenses of the Water Center of Excellence (WaterStart) were under the projected quarterly budget by \$80,892.00. Total Salary & Benefits expenses were under the projected amount due vacation time and sick days. Operating Expenses were significantly under budget due to less travel than expected. The Commercialization Fund was also under budget. However, deals closed in Q4 will account for \$215,000 allocated for projects to deploy in Q1 2017. Currently, WaterStart is \$2,242.62 over the projected Year-to-Date budgeted amount of \$1,177,500.00.

WaterStart Expenses			
For Reporting Period			
Oct. 1 – Dec. 31, 2016			
	Q4 Actuals	Q4 Budget	Year to Date Jul 1,2015-Dec. 31, 2016
Total Salary & Benefits	\$ 111,966.24	\$ 124,000.00	\$ 631,142.59
Operating Expenses	\$ 20,641.76	\$ 33,500.00	\$ 161,735.57
Other Expenses	\$ 0	\$ 0	\$ 98,575.65
Commercialization Fund	\$ 44,000.000	\$ 100,000.00	\$ 464,896.81
Total	\$ 176,608.00	\$ 257,500.00	\$ 1,356,350.62

In the fourth 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			
Oct. 1 – Dec. 31, 2016			
	Actuals	Budget	Year to Date Jul 1,2015- Dec. 31, 2016
Grants / Contracts*	\$ 0	\$ 124,000.00	\$ 131,080.00
Gifts	\$	\$	\$ -
Cont. ED/ Outreach	\$	\$	\$ -
Other Contributions*	\$	\$ 31,250.00	\$ 195,000.00
Knowledge Fund	\$ 176,608.00	\$ 257,500.00	\$ 1,128,996.91
Total	\$ 176,608.00	\$ 412,750.00	\$ 1,455,076.91

Section V: Appendix

Appendix 1 – Sales Pipeline

See Attached table for current sales pipeline

