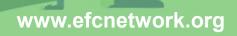




Ask Me Anything: CWSRF Eligibilities

February 10, 2025



This program is made possible under a cooperative agreement with US EPA.

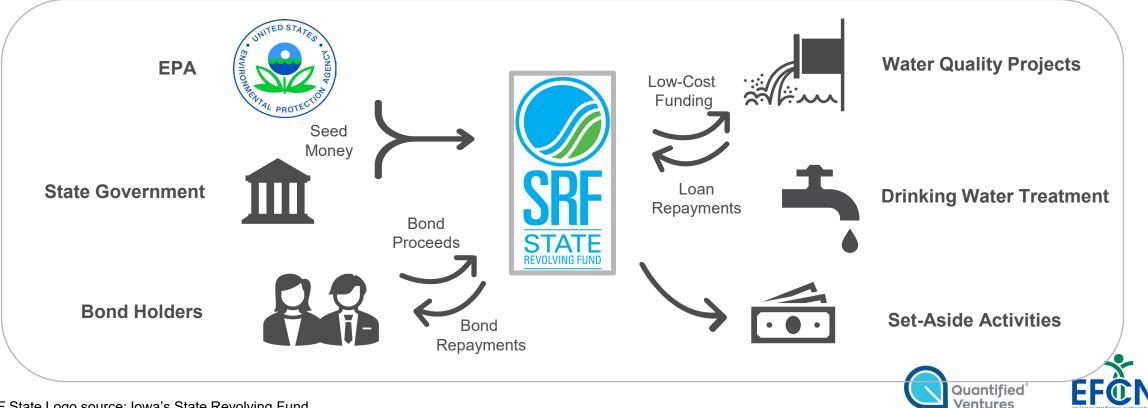
About Us

The **Environmental Finance Center Network (EFCN)** is a university- and non-profit-based organization creating innovative solutions to the difficult how-to-pay issues of environmental protection and water infrastructure.

The EFCN works collectively and as individual centers to address these issues across the entire U.S, including the 5 territories and the Navajo Nation. The EFCN aims to assist public and private sectors through training, direct professional assistance, production of durable resources, and innovative policy ideas.

What are the SRFs?

- Low interest revolving loan program with subsidies for targeted projects and communities
- Money comes from EPA/Federal Government, state match, loan repayments, interest, bond proceeds



What is the correct answer to any SRF question?

Every state is different. It depends.



Where it all Began

Federal Water Pollution Control Act 1948

- Basis of modern Clean Water Act
- Provided protections for surface water with focus on navigation
- https://sgp.fas.org/crs/misc/96-647.pdf



1981 Amendments

Streamlined construction

quality standards

• Expanded funding eligibilities





Where it all Began

2000 Amendments

- Grant programs to support monitoring and advisory programs at marine coastal and Great Lakes beaches
- Research and development of recreational criteria



- Cost and Effectiveness, A/E procurement, Fiscal Sustainability Plan
- Expanded eligibilities for projects and borrowers
- Extended loan terms, additional subsidy, affordability criteria
- https://crsreports.congress.gov/product/pdf/IF/IF11322





Where it all Began

2018 amendment- American Water Infrastructure Act (AWIA)

- Reauthorize appropriations
- Update eligibilities
- Expand subsidy, loan terms, repayment start
- AIS and Davis Bacon permanent







Loan Rate and Terms

• Terms

- 20- historic max; many states still limit to this lower term
- 30- base; many states still have this limit
- Programmatic financing
- Balloon payments
- Rate
 - Must be at or below market rate
 - Fees- not required but typical

- CWSRF Loans
 30 years
 Or Useful Life (whichever is less)

 Purchase Municipal Debt Obligations (CW/DW)

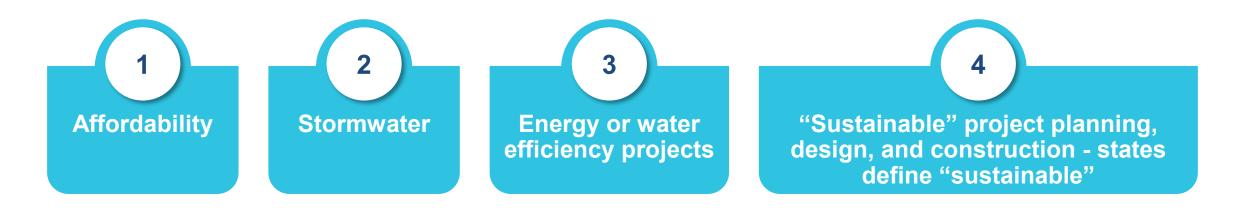
 CWSRF >30 years
- Loan term cannot exceed expected useful life of assets funded; may be weighed and averaged





CWSRF Additional Subsidy

Every year states can use additional subsidy via grants or loan forgiveness. "Add sub" may be awarded based on



Amounts of additional subsidy range between 10-40% of federal grant amount





CWSRF Additional Subsidy

SRF Funding Program	Additional Subsidy Percentage	Eligibility for Additional Subsidy
CWSRF BIL General Supplemental	49%	 Assistance recipients that meet the state's affordability criteria Benefit to individual ratepayers in residential user class Water/energy efficiency, stormwater mitigation or sustainable projects
CWSRF BIL Emerging Contaminants	100%	Any eligible project
CWSRF 2022 Appropriation/Continuing Resolution	10%	Any eligible borrower
CWSRF Base Program (CWA)	10%-30% (if the appropriation is over \$1B)	 Assistance recipients that meet the state's affordability criteria Benefit to individual ratepayers in residential user class Water/energy efficiency, stormwater mitigation or sustainable projects





Affordability Criteria

- The FWPCA section 603(i)(2)(A) requires that criteria be based on:
 - Income;
 - Unemployment data;
 - Population trend; and
 - Other data determined relevant by the State
- States develop their own criteria: may be in statute, IUP, guidance, policy, etc.
- Existing affordability criteria that meets the requirements established in section 603(i)(2)(A) they may continue to be used. Criteria must have undergone the appropriate public notice and comment process within their respective States.
- EPA Tool: <u>https://screeningtool.geoplatform.gov/en/#7.01/45.863/-68.016</u>
- Example states
 - NJ: <u>https://dep.nj.gov/ej/communities/</u>
 - NY: <u>https://www.dec.ny.gov/public/911.html</u>







CWSRF Affordability Criteria: Other Factors Used





Ventures

Eligibility- Section 212 Borrower & Project

Clean Water Act Section 603(c)(1) Eligibility Section 212: Also referred to as "treatment works" or "grey infrastructure" projects. These projects are limited to municipal borrowers only.

- Any new construction, repair, or replacement of publicly owned treatment works (POTW)
- CSO management, sediment controls, point-source stormwater management
- Water conservation, efficiency, or reuse
- Energy conservation needs for POTWs

Public Ownership

- Publicly Owned Treatment Works (Section 212)
- Land purchase or lease (including easements) for treatment works construction, land used in the treatment process
- Water and Energy Conservation projects for POTW's prorated share of alternative energy project providing power to a POTW
- Water conservation projects reducing demand for POTW capacity

Public Ownership

- Stormwater projects (permitted & unpermitted)
- Decentralized wastewater treatment systems
- Watershed projects (section 122)
- Recycled water and water reuse projects
- Security initiatives at POTW's
- Water and energy conservation / efficiency





Eligibility- Section 319 Borrower & Project

Clean Water Act 603(c)(2) Eligibility Section 319: These projects are also known as "nonpoint source" projects or "green/natural infrastructure". Further, CWSRF eligible projects can fall under the following categories. Borrowers can be any borrower, including non-profit organizations or for-profit entities. However, most states still restrict borrowing to municipalities.

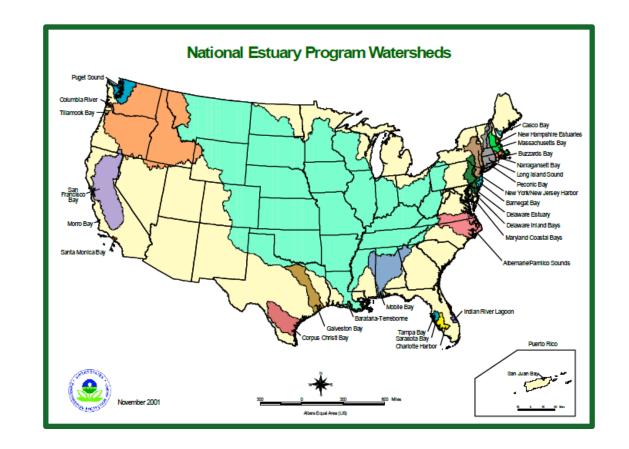
Green stormwater	Agriculture BMPs	Decentralized WWTF	Resource extraction
Contaminated sites	Landfills	Habitat protection & restoration	Silviculture
	GW SWP	SW SWP	





Eligibility- Section 320 Borrower & Project

Clean Water Act 603(c)(3) Eligibility Section 320: These projects include the development and implementation of an estuary Comprehensive Conservation and Management Plan (CCMP). Borrowers can be any borrower, including non-profit organizations or for-profit entities. However, most states still restrict borrowing to municipalities.







Ineligibility

- Federally-owned POTWs
 - Military bases
 - Prisons
- Privately-owned POTWs (CWSRF "212 projects")
- Any project that is not allowed at the state level





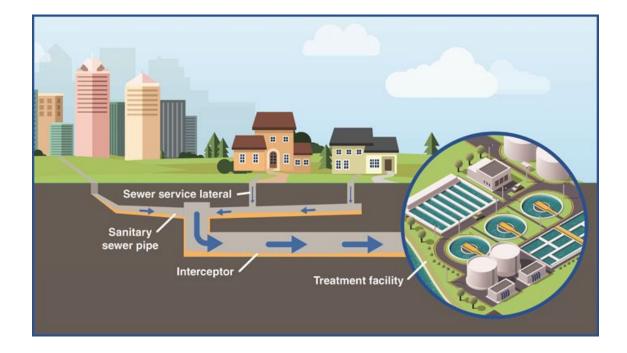


Section 212





WWTF? POTW?

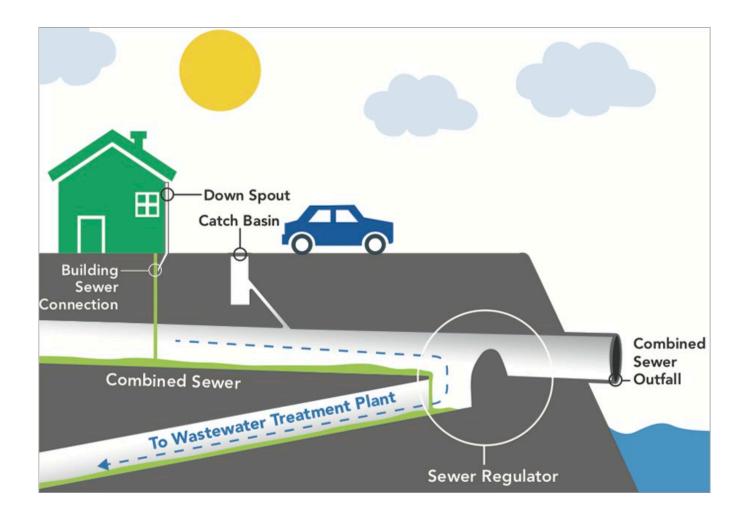


- Most WWTFs were constructed ~40 years ago
- The nation's more than 16,000 wastewater treatment plants are functioning, on average, at 81% of their design capacities, while 15% have reached or exceeded it.
- CWSRF loans are only for public borrowers!!!
 Why?









- Combined Sewer Overflows
- Very expensive, disruptive projects
- Can be significant source of nutrients or e. Coli in public waterways





WWTFs + Climate Mitigation Resilience

- Sea walls
- Levies/dykes/berms
- Relocation/elevation of assets or facilities above current/projected flood stage
- Installation of flood attenuation, diversion or retention
- Installation of wind resistant features
- Saltwater resistant equipment
- Portable pumps

- Floodwater Pumping systems
- Physical hardening of electrical systems/equipment
- Dry floodproofing of structures
- Elevates walls/caps for treatment tanks
- Redundant
 equipment/components
- Overflow tanks/tunnels
- Regionalization/interconnections



Remember: SRF can pay for climate risk resilience planning for WWTFs—just don't call up asking for money for flooding!





Energy + Water Conservation

Water Efficiency	Energy Efficiency	On-Site Renewable Energy
Water meters	 Energy efficient equipment and components, including: 	Wind and solar
 Plumbing fixture retrofits or replacement 	Lighting	 Methane capture and energy conversion equipment
Water efficient irrigation equipment	• HVAC	 Biosolids drying/dewatering and energy conversion equip.
Education programs	 Process equipment 	Co-digestion
 Incentive programs (ex. Rebates of installing rain barrels or permeable surfaces) 	Electronic systems	 Combines heat and power (CHP) systems
		 Hydroelectric systems that harness WW flows to, from, or within a treatment works

- The biggest expense for most WWTFs is energy! Energy and water audits are also eligible costs.
- Energy efficiency projects are mostly for public borrowers, with few exceptions; water efficiency varies depending on type of project.

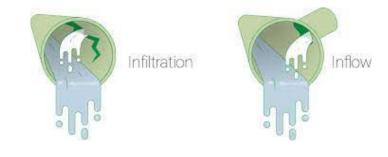


Conserving Energy via Water Efficiency



Projects that reduce the volume of water being pumped and treated may result in reduced energy usage. Examples include:

- Inflow and Infiltration (I/I) correction
- Downspout disconnection
- Water conservation activities
- Water meters
- Plumbing fixture retrofit and replacement
- Water efficient appliances









Treatment Works Definition

- Section 212= Traditional CWSRF "pipes and pumps" projects—these projects have the majority of federal requirements
- WRRDA 2014 gave states the ability to define which projects are considered treatment works vs nonpoint source (212 vs 319).
- Non-treatment works projects do not have to comply with →



Section 319





Green Stormwater

Potential repayment sources include:

- Stormwater utility fees
- Fees paid by developers
- Recreational fees (fishing licenses, park entrance fees
- Dedicated local, county, or state taxes or fees
- Donations or dues made to nonprofit organizations
- Wastewater user charges
- Business revenues

Green Infrastructure

- Green roofs, streets, and walls
- Rainwater harvesting collection, storage, management, distribution
- Real-time rainwater harvest control systems
- Constructed wetlands
- Bioretention/bioswales (rain gardens)
- Permeable pavement
- Wetland/riparian/shoreline creation, protection and restoration
- Urban tree canopy restoration/creation
- Replacement of grey with green infrastructure

\$38M in CWSRF invested in 2021

The most flexible eligibility in the CWSRF tool kit—any borrower, huge variety of projects

Stormwater or flood water?





Green Stormwater Co-Benefits

Air Quality-reduced particulates	Habitat and Wildlife
Reduced air temperatures	Green Jobs
Reduced power plant emissions from A/C	Increased Property Values
Remove Air Pollutants	Cheaper than grey infrastructure
Heat Island Mitigation	Reduced Noise Pollution
Climate Resiliency	Access to Recreation/green space



Communities of color are three times as likely to live in naturedeprived areas as white Americans.





Agriculture BMPs

Cropland Activities

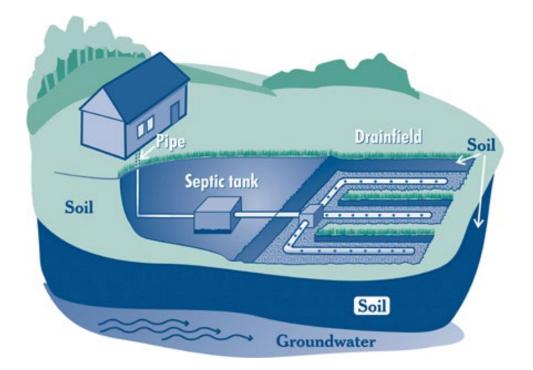
- Manure injection equipment
- Manure spreaders
- Water efficient irrigation
- Conservation tillage equipment
- Windbreaks
- Sediment control basins
- Terraces
- Diversions
- Buffer and filter strips
- Rip-rapping
- Streambank stabilization
- Chemical use reduction (ex. chemical storage containment)

AFO Activities

- Livestock/milk house waste management systems
- Manure containment structures
- Vessel composters
- Manure injection equipment
- Well sealing
- Water diversions to avoid feedlots
- Fencing/alternative water supply for animals to keep out of water bodies



Decentralized Wastewater





Estimated number of households on septic systems

11 out of 51

Number of states that have used CWSRF for septic projects as of 2020





Contaminated Sites, Landfills, etc.

- Resource extraction: mining, quarrying, hydraulic fracturing, and oil/gas operations—projects that remediate or prevent contamination
 - Acid mine drainage
 - Clean up from fracking wastewater
 - Prevent aquifer contamination
- Contaminated Sites: Brownfield, Superfund, Storage tanks
- Landfills: Closure and landfill leachate and treatment



Before image of the Genetta Park area. Source: 2D Studio LLC



Genetta Stream prior to the final phase. Source: 2D Studio LLC





Habitat Protection & Restoration

Shoreline Activities

- Re-establish riparian vegetation
- Wetlands development or restoration
- Swales
- Filter strips
- Barrier beach and dune systems

Instream Activities

- Re-establish aquatic vegetation
- Restoring oyster/mussel
 beds
- Establish artificial reefs
- Fisheries and shellfish restocking or restoration
- Fish ladders
- Removal of contaminated sediment
- Water control structures for flow regime and salinity
- Dam removal
- Culvert removal

Invasive Species Control

 Equipment to remove or prevent invasive species spread







Why Don't More States Fund 319 Projects?

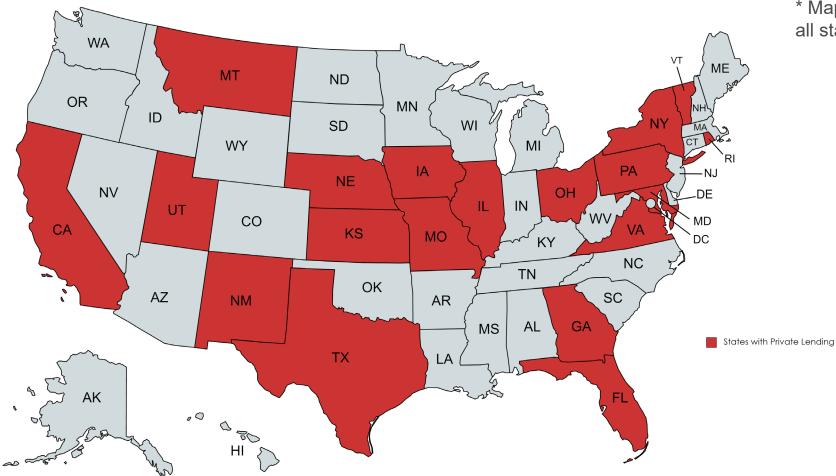
- Many programs only fund 'traditional' projects
- Most states can not fund non-profits/private borrowers directly
- Bias towards point source and perceived lack of demand
- Lack of understanding of value by borrowers
- 'It's the way it's always been done'
- Capacity challenges at the state level to do project development
- No traditional repayment stream







National Private Lending Eligibility



* Map created by QV; may not represent all states that lend to private entities









A small brewery started in someone's garage several years ago. It was very successful and has expanded to its own operation and has become a core part of economic development for the community as it draws in several thousand tourists per year. The brewery currently discharges its waste to the municipal WWTF which is causing very high and unpredictable slugs of nutrient in the plant, placing a strain on the facility. The municipality wants to require the brewery owner to install a pretreatment device that will lessen the impact to the WWTF. The municipality is even willing to take on the loan for the brewery since their state does not directly lend to private entities.

Is this project CWSRF eligible? Quick hint: pretreatment is considered centralized wastewater treatment.



A municipality is converting an underutilized parking lot into a natural turf soccer field. Runoff from the field and stands will be directed to four bio-basins and infiltrated. Any overflow from the basins will be directed into the municipal stormwater drainage system. Components of the project include:

- Construction of the bio-basins
- Lighting for the field
- A lawn tractor dedicated to the facility
- Security fencing around the bio-basins

Which of these components are CWSRF loan eligible?





The municipality's WWTF is under construction using a CWSRF loan. However, a sewer line collapsed on the other side of town. The contractor is taken off the WWTF project to repair the collapse.

Is this repair eligible under the current CWSRF loan? Why?



A municipality seeks to replace an undersized culvert that is restricting flow such that a downstream wetland is having negative water quality and quantity issues.

Is this CWSRF loan eligible? Why?



A municipality wants to purchase land that surrounds their municipal drinking water wells. This land is completely unrelated to their WWTF.

Is this CWSRF loan eligible?



A municipality wants to eliminate downspouts that are connected to combined sewer system to reduce CSO events. The solution is to install new pervious pavement in alleys, create green space and direct the downspouts to those areas which will allow for infiltration. Additionally, the municipality will work with a nonprofit to install playground equipment, creating outdoor space in an under-resourced community.

Which parts of this project are loan eligible?

- The pervious pavement
- The planting of green space
- Downspout disconnection
- Playground equipment





A community has an abandoned uncapped and unlined landfill and has been ordered by the state to properly close it. Because it is unlined, there is concern groundwater in the area could become contaminated. The community has plans to properly close the abandoned landfill, build a new lined landfill with a proper leachate collection system on the adjacent property, and use the site as a transfer station.

Is this project CWSRF loan eligible? Why?



A state transportation agency is doing a bridge replacement project that has to undergo an environmental review. Part of this review required the State to create an oyster relocation project, removal of endangered falcon nests, and restoration of marshland. This project is adjacent to a national designated estuary and these project components are consistent with the estuary's Conservation and Comprehensive Management Plan (CCMP).

Is this project CWSRF loan eligible?





A manufactured home community (MHC), which is privately owned, has a failed decentralized wastewater treatment system. The community's PER has laid out two options: the first option is to replace the existing leach field with an advanced treatment system; the second is to connect to the municipal collection system a quarter mile away from the MHC.

Which option is CWSRF eligible? Why?



Federal Crosscutters: SRF Matrix

Quantified [®] Ventures

Matrix of SRF Requirements							
	All CWSRF Projects	Only CW Equivalency	Only Governments	Only Treatment Works	All DWSRF Projects	Only DW Equivalency	Additional Notes
A/E Contract Procurement (RFQ, QBS)		Х					Applies after 10/1/2014; WRRDA Guidance p 7
American Iron & Steel (AIS)				x	x		https://www.epa.gov/cwsrf/american-iron-and-steel-requirement-guidance-and-questions-and-answers
Buy America Build America (BABA)		X				X	https://www.epa.gov/cwsrf/build-america-buy-america-baba-resources
Crosscutters: Environmental		X				X	Crosscutter handbook
Crosscutters: Socioeconomic		X				Х	Crosscutter handbook
Crosscutters: Super (Civil Rights)	Х				Х		Crosscutter handbook
Cost and Effectiveness (C&E)			Х				Applies after 10/1/2015; <u>WRRDA Guidance</u> p 6
David Bacon Wage Requirements				Х	Х		WRRDA Guidance p 3; DB Guidance; David Bacon Handbook
Disadvantaged Business Enterprises (DBE, WBE)		X				Х	40 CFR Part 33
FFATA		X				Х	SRF Policy 9/22/2014
Fiscal Sustainability Plans (FSP)				Х			Applies after 10/1/2014; excludes new WWTPs; <u>WRRDA Guidance</u> p 12
Generally Accepted Government Accounting			Х		Х		WRRDA Guidance p 4
NEPA-like SERP				x	x		CW: 40 CFR 35.3140 DW: 40 CFR 35.3580, Also see <u>DWSRF Program Operation Manual</u>
Expected Useful Life > Loan Term	x				x		CW: <u>WRRDA Guidance</u> p 12; required even if loan term <20 yrs; only applies to loans. DW: <u>AWIA Implementation</u> 3/25/2019 memo
Signage		Х				Х	SRF Policy 6/3/2015
Single Audit		Х				Х	State does not need to collect or review
Telecomm Equipment & Services		Х				Х	2 CFR 200.216
Technical, Financial & Managerial Capacity (TFM)					x		AWIA Implementation 12/2/2019 memo 43

What is the correct answer to any SRF question?

Every state is different. It depends.



Upcoming Trainings

What is the Green Project Reserve (GPR)? March 5, 2025 / 11:00-1:00 pm EST

What is Readiness to Proceed? March 17, 2025 / 2:00-4:00 pm EST

What are the important SRF documents? April 2, 2025 / 11:00-1:00 pm EST

Is 'Free Money' actually free? April 21, 2025 / 2:00-4:00 pm EST

For more information and to register visit: https://efcnetwork.org/event/virtual-office-hours-ask-me-anything-srf-technicalassistance-open-discussion/





Community Finance Team https://www.quantifiedventures.com/community-finance



Ashley Lucht

- Community Finance Team
- Former Director of Capital Planning at the Vermont Municipal Bond Bank
- Former DWSRF Project Manager for the State of Vermont
 - Contact me:



Lucht@quantifiedventures.com



