

Characterizing Volunteer Monitoring Programs: Results from 2011-12 Volunteer Water Monitoring Needs Assessment

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United States
Department of
Agriculture

National Institute
of Food and
Agriculture



Extension Volunteer Water Monitoring Network

- Established in 2000 through a USDA Extension grant
- Goals:
 - Build a support system for Extension-connected volunteer water quality monitoring efforts
 - Expand & strengthen the capacity of existing VM programs
 - Support development of new groups (Extension or not)



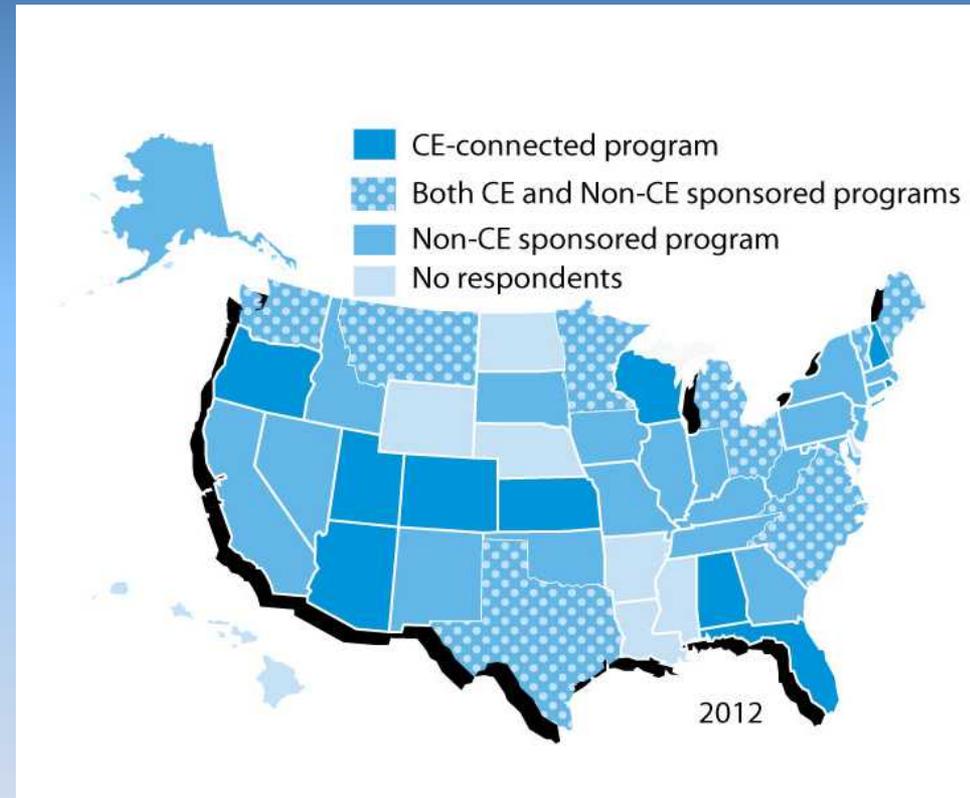
www.usawaterquality.org/volunteer

2011 - 2012 Assessment

- Recent goal was to determine the **status** of VM programs, including learning how they began, their goals, ongoing efforts, resources, and **needs**.
- Online needs assessment carried out in fall and winter 2011-2012.
 - Contacted thru EPA VM & EVMN listservs
 - 3 rounds of e-requests
 - Begging email to individual EVMN coordinators

2011-12 Needs Assessment Results

- 102 programs from 42 states responded
- 38 Extension-connected programs
- 64 non-Extension programs
- Programs began 1971-2011



**~500 self-characterized
VM programs in US**

Monitoring Programs

- ◆ Rivers/streams (69*)
- ◆ Lakes/ponds (35)
- ◆ Estuary/Marine (12)
- ◆ Wetlands (10)
- ◆ Beaches (7)
- ◆ Wells (2)

* = # programs

The Largest Programs...

- MiCorps - **20,000 volunteers** in a single program
- **5000 streams** (MO Stream Team)
- **900 lakes** (WI Citizen Lake Monitoring Network),
- **300 wells** (MT State University Extension)
- **300 beaches** (Alliance for the Great Lakes)
- **>150 wetlands** (Friends of the Rouge River, MI),
- **125 estuary/marine** locations (Florida Lakewatch)

Impressive numbers...

Water Body Type	Number of Programs	Median Number of Volunteers	Maximum Number of Volunteers	Median Number of Sites	Maximum Number of Sites
River/stream	69	50	20,000	30	5000
Lake/pond	35	100	1200	35	900
Estuary/ Marine	12	50	1046	15	125
Wetlands	10	50	365	5	158
Beach	7	52	9000	40	300
Wells	2	168	300	156	300

Totals...

Water Body Type	Number of Sites	Number of Volunteers
River/stream	14,619	46,225
Lake/pond	4690	7386
Wells	312	336
Beach	659	9383
Wetlands	295	708
Estuary/Marine	433	1684
other	111	8527
TOTALS	21,118	74,249

Contributing

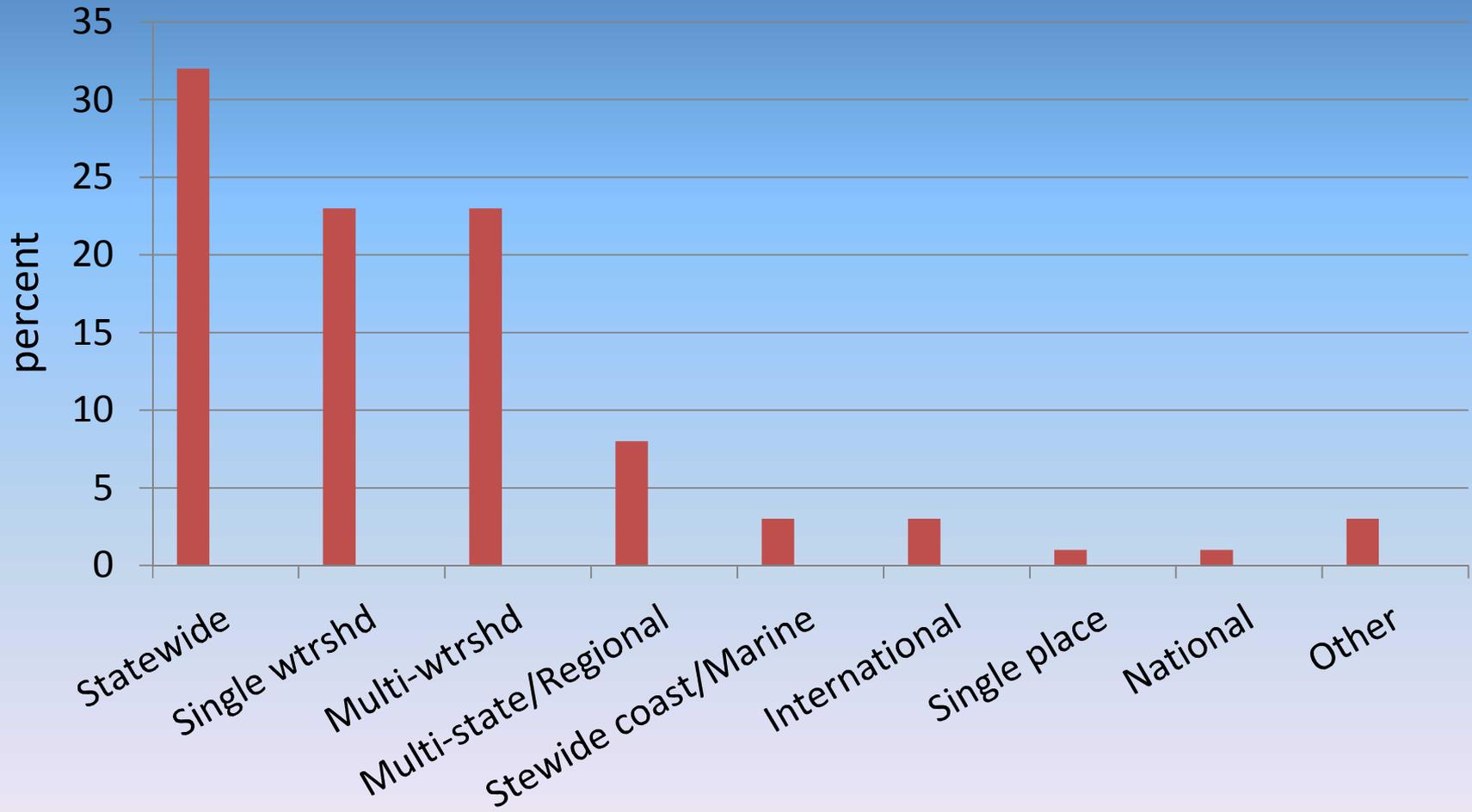
>514,700 hours (2010)
Valued at \$10,816,712*

Ranging from
15 hours (local WI program) to
260,000 hours (Texas Master Naturalist Program)

* www.independentsector.org
using each state's valuation

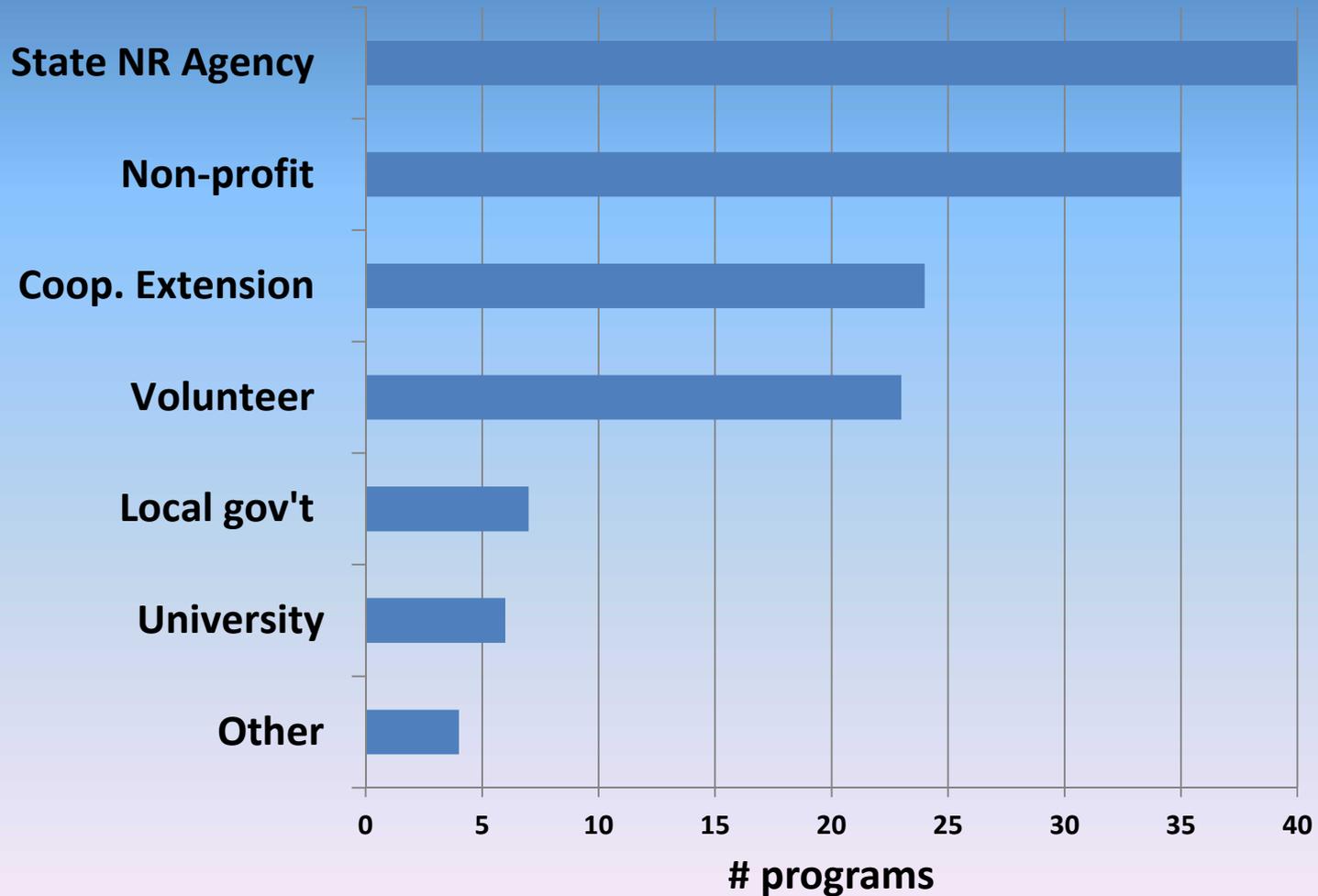


Geographic Extent of Programs



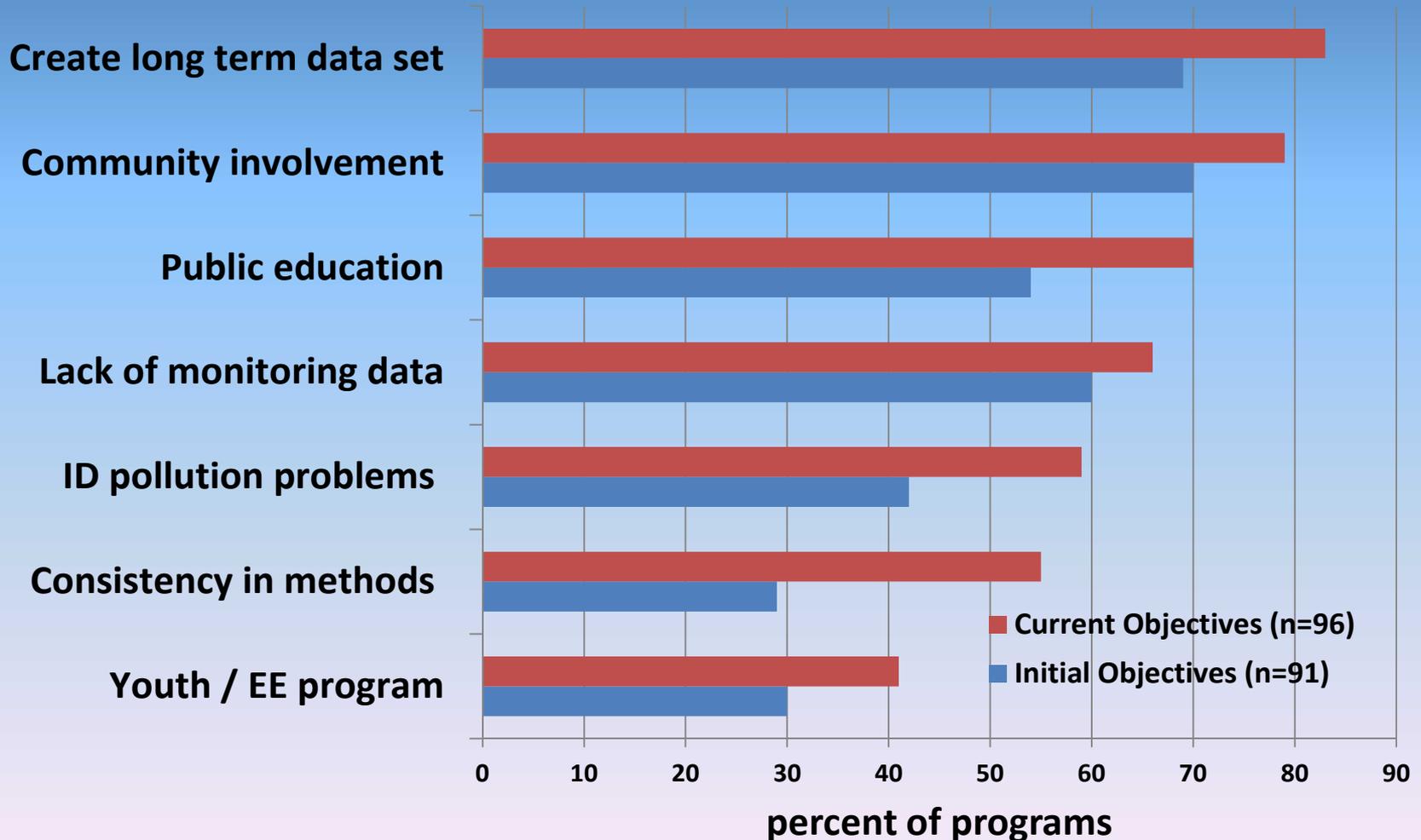
Who Started Programs

Note: 25 programs indicated multiple leaders led the charge to initiate their program.



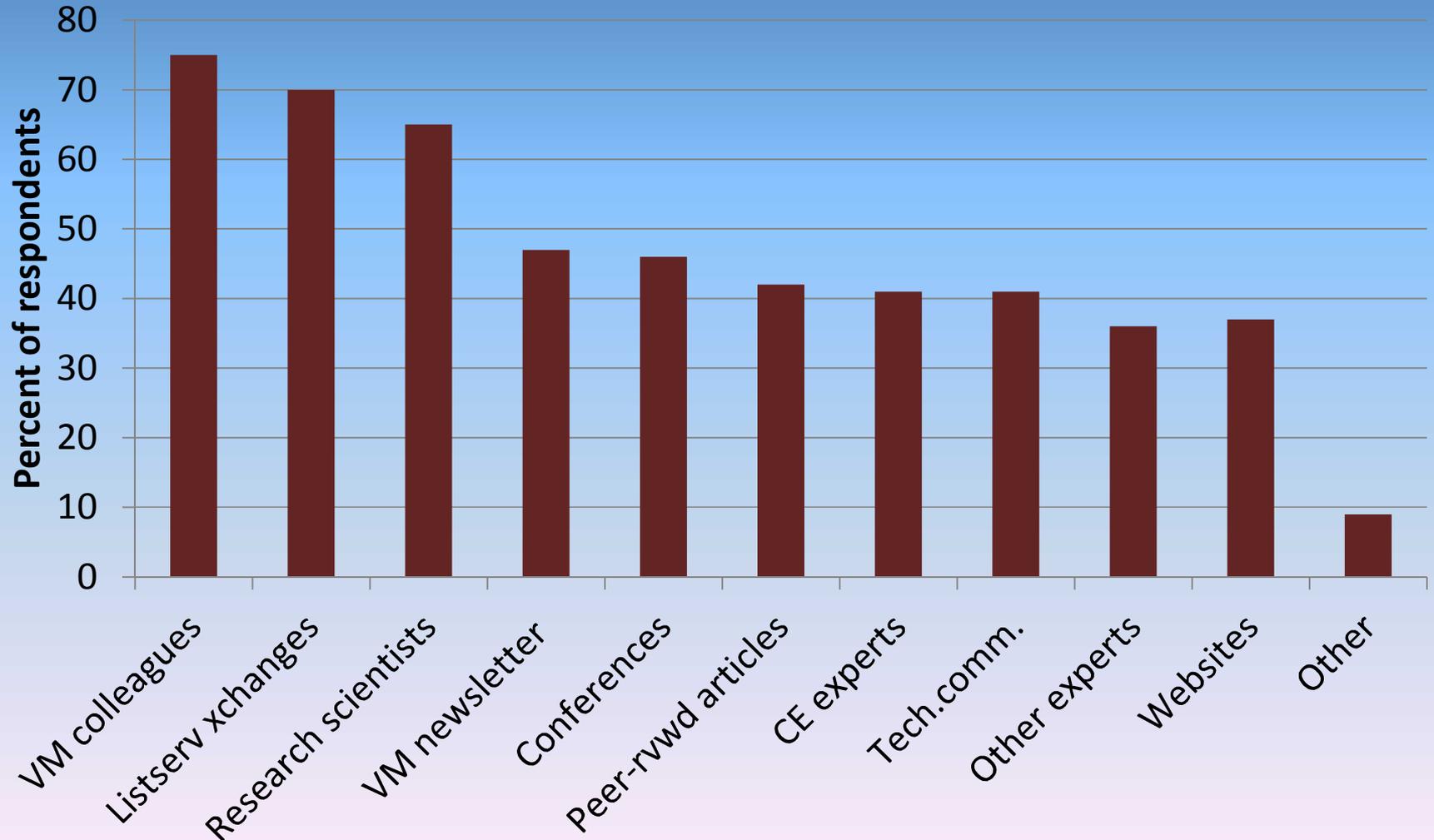
Why Programs Began and Current Objectives

Note: About 90% of responding programs indicated multiple program objectives.

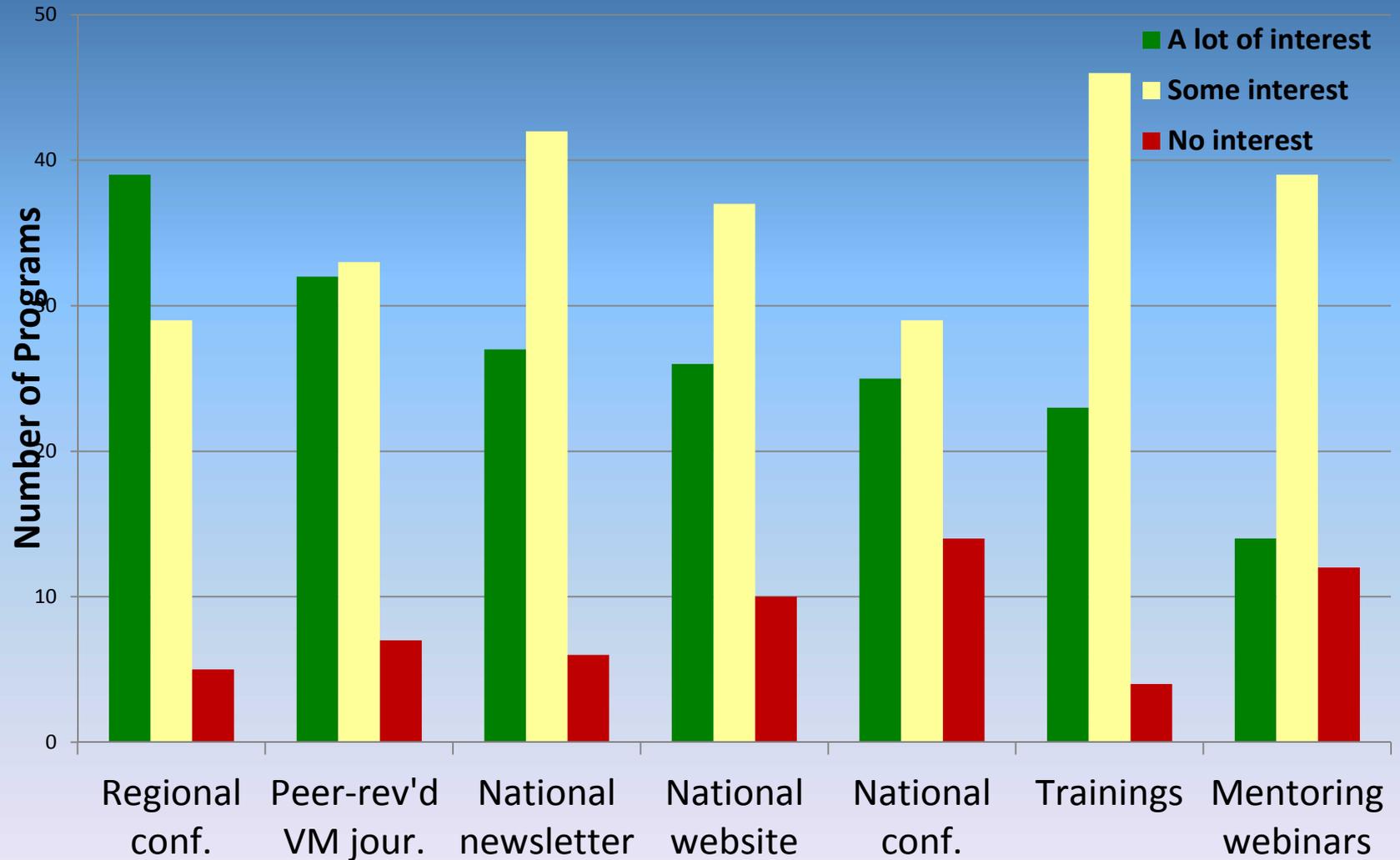


We Rely Upon Each Other for Program Development and Support

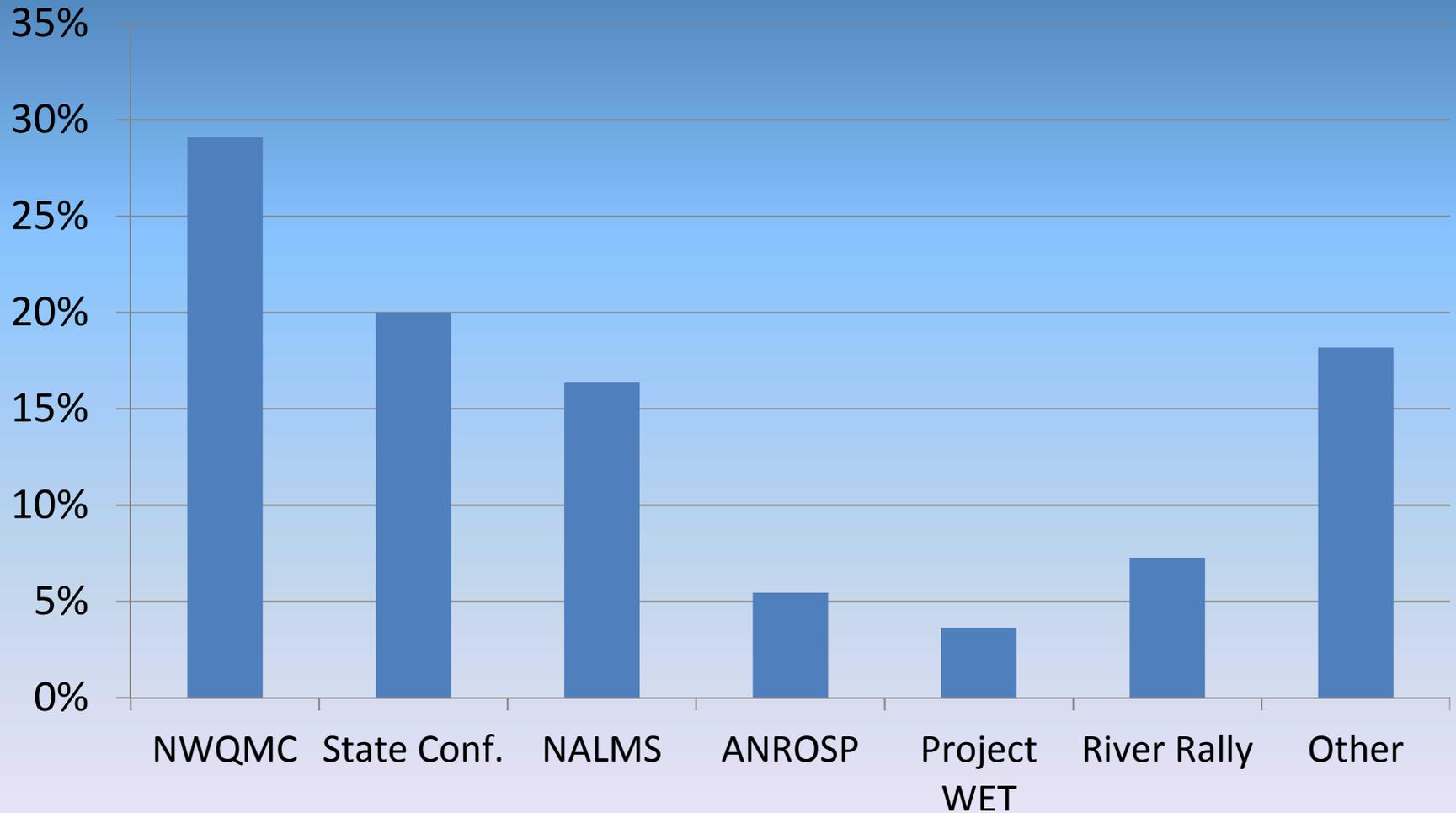
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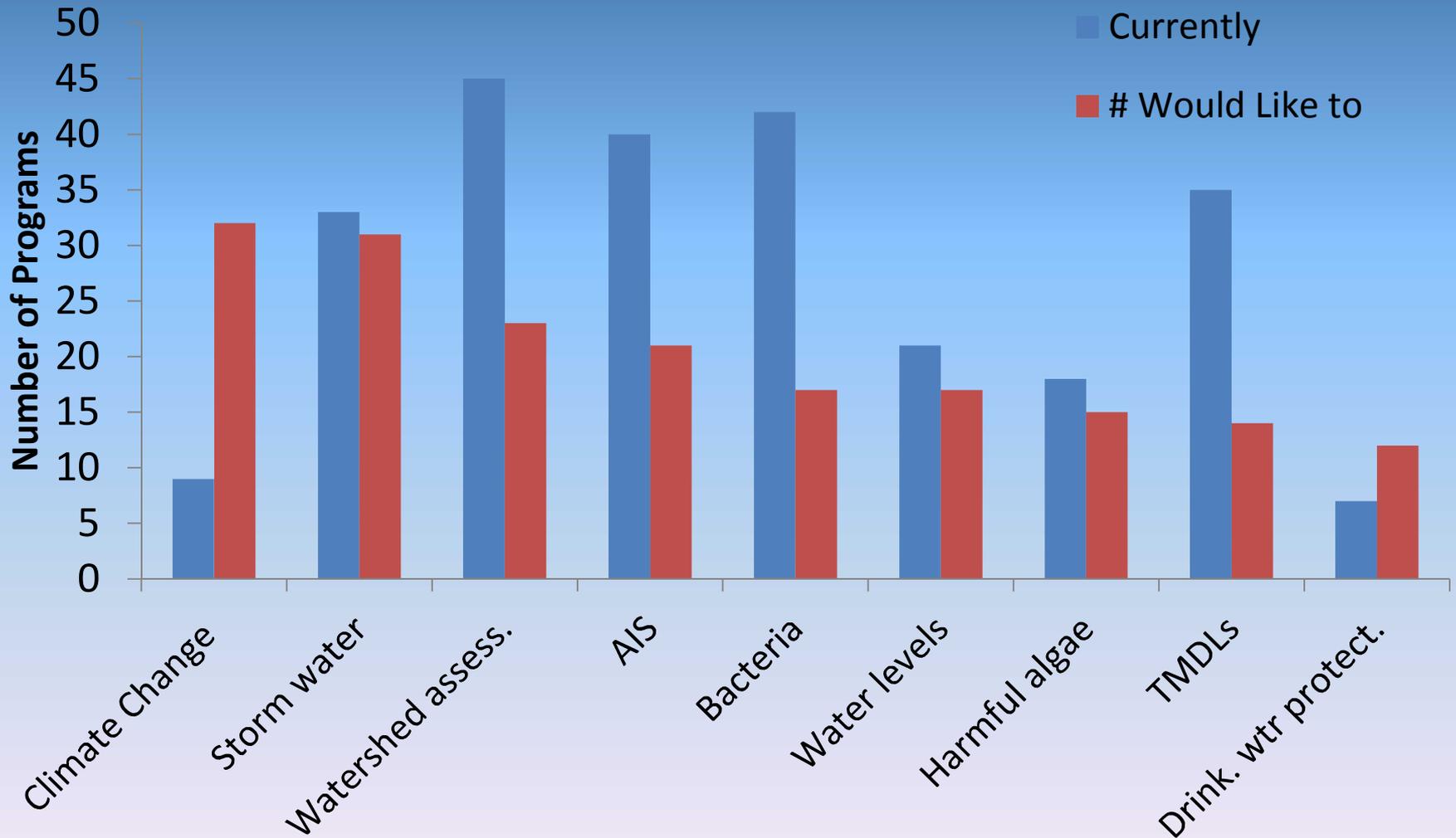
Interest in...



Top Conferences Providing Support for VM Programs (n=55)



High Priority “Up and Coming” Topics



New Partnerships have formed to Address Up and Coming Parameters

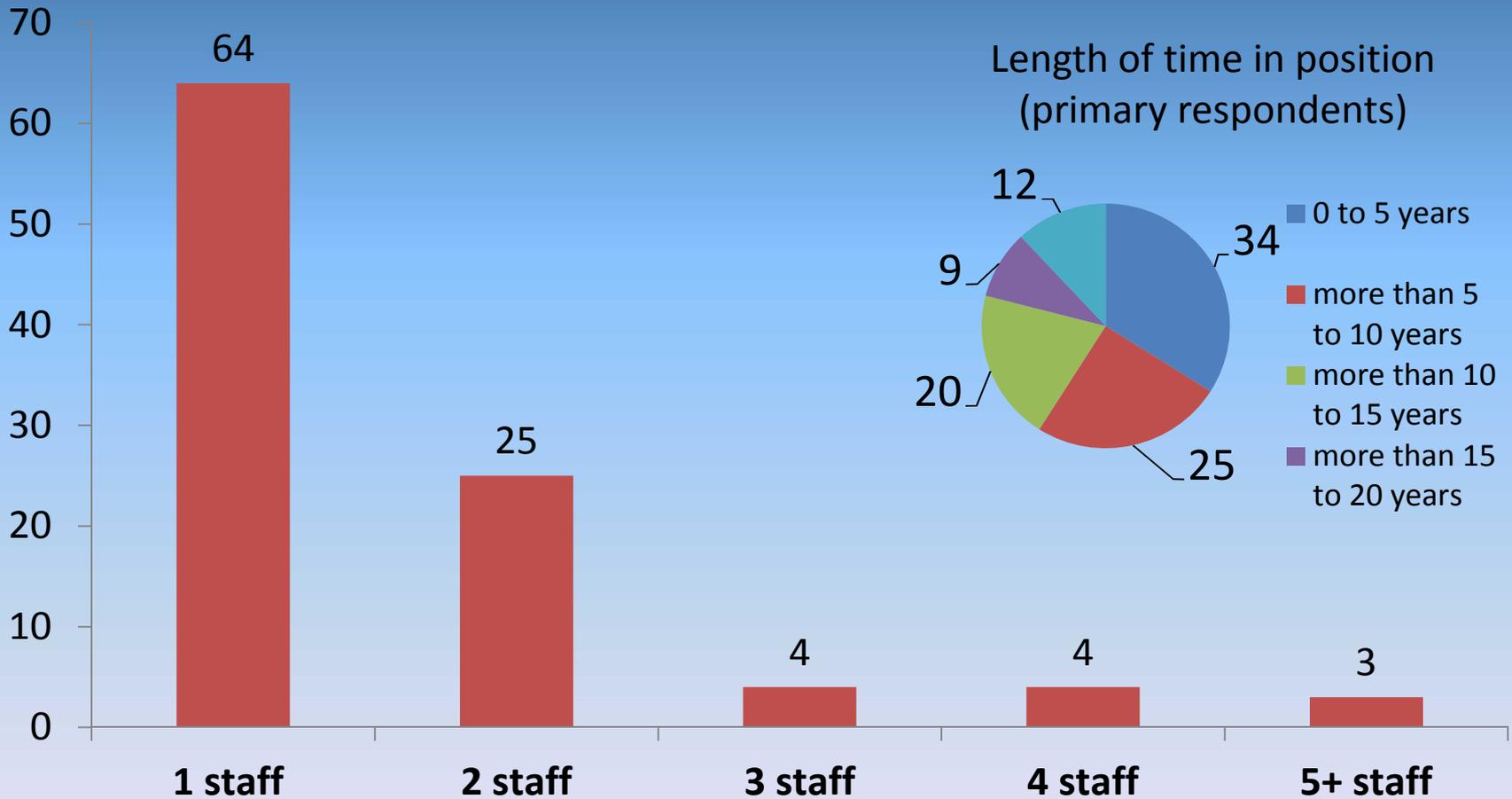
- Harmful algal bloom monitoring in NY developed through an innovative partnership between SUNY and the state health dept.
- AIS training for all monitors to avoid further spread by their actions (vs. more common AIS program that sends volunteers out to seek AIS)
- *E. coli* monitoring in lakes to be used in TMDL development
- Volunteer monitoring program taking over stormwater monitoring outlined in watershed protection plans

Top Program Concerns

- **Funding stability**
- **Funding amount**
- **Staff Time (overworked *and* see above)**
- Use of Program's data
- Volunteer Retention
- Analyzing data and sharing results
- Volunteer support
- Understaffing (*see top 3 above*)

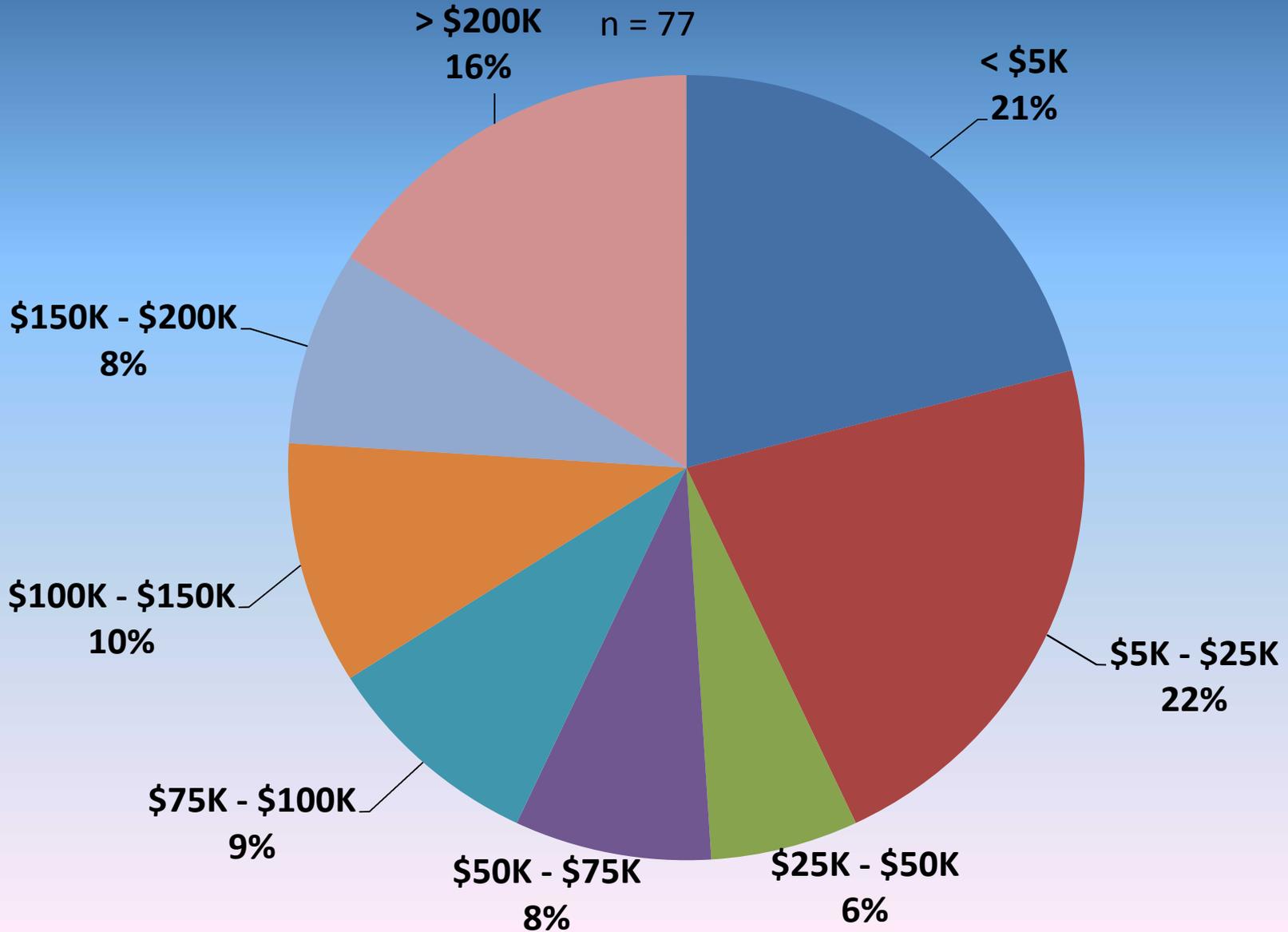
Staffing of VM Programs

n=100

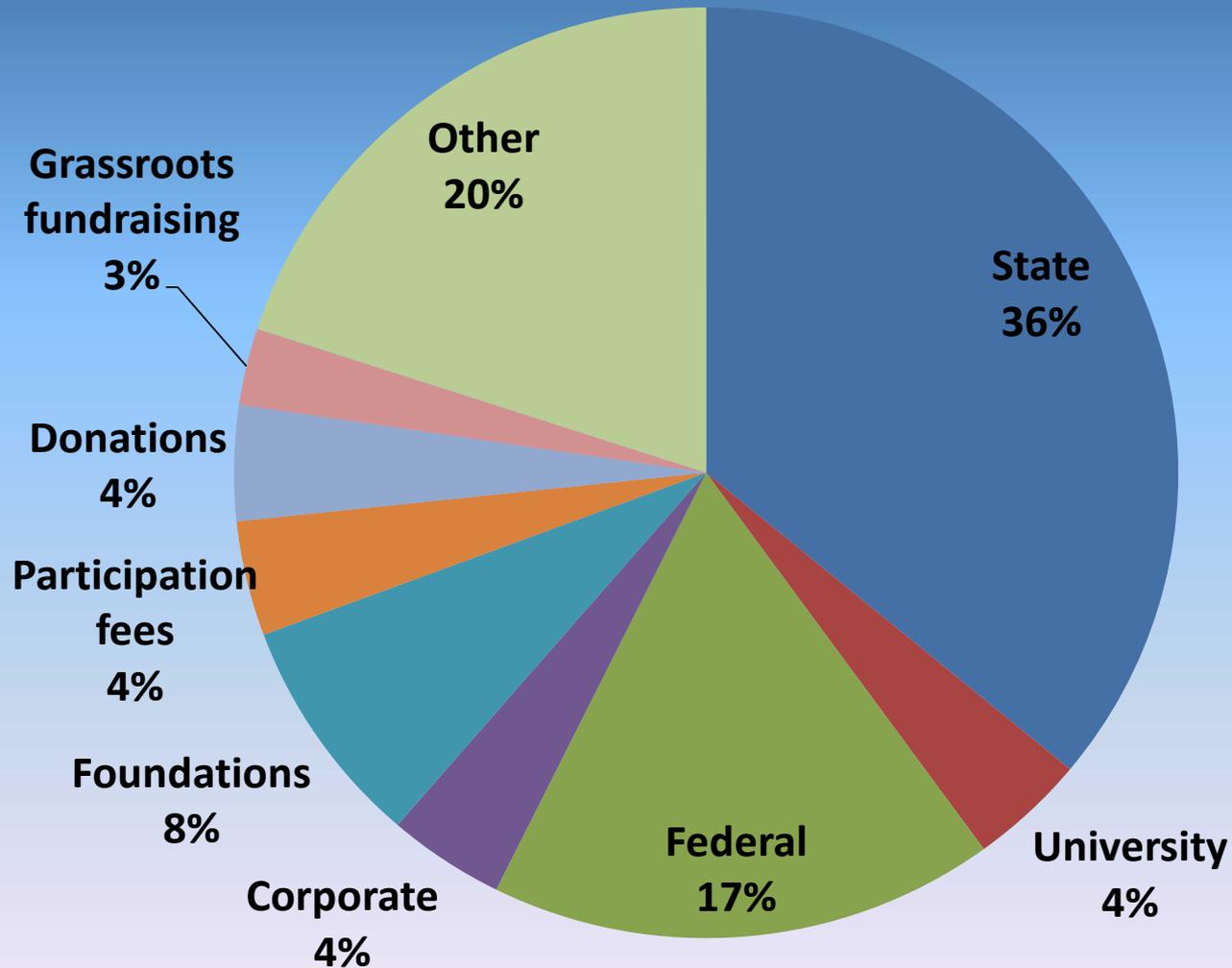


88% are paid

Program Budgets

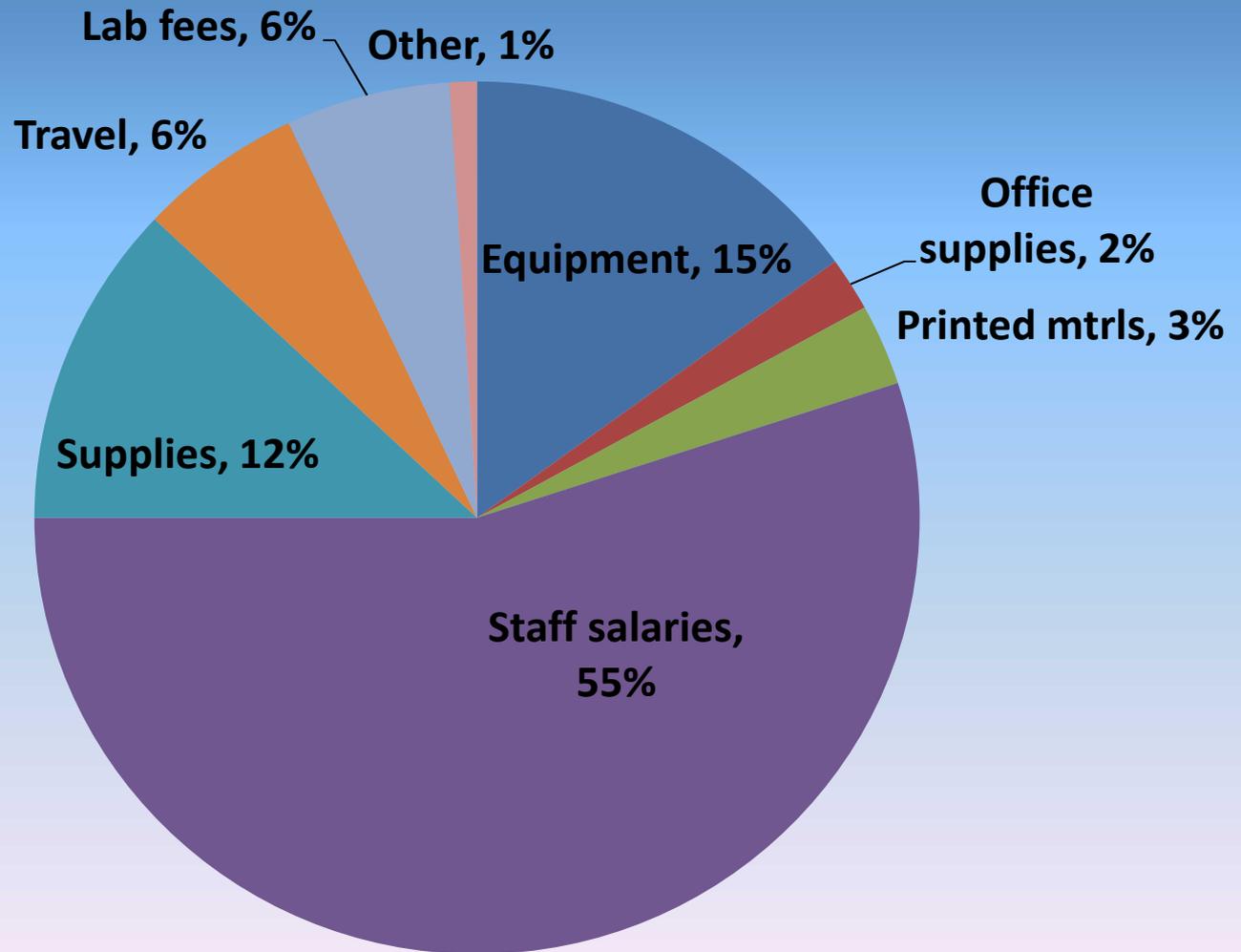


Sources of Funding

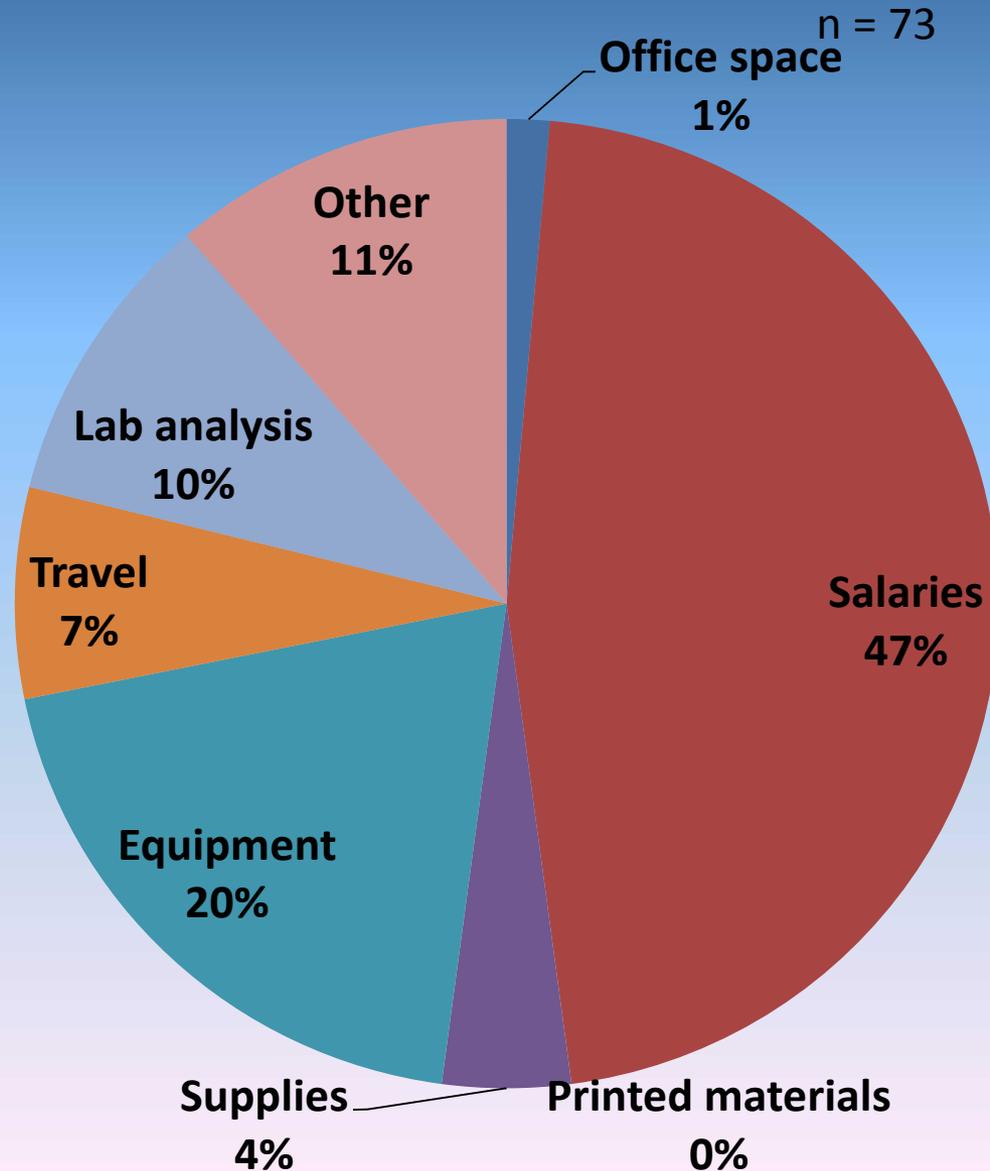


Funding What?

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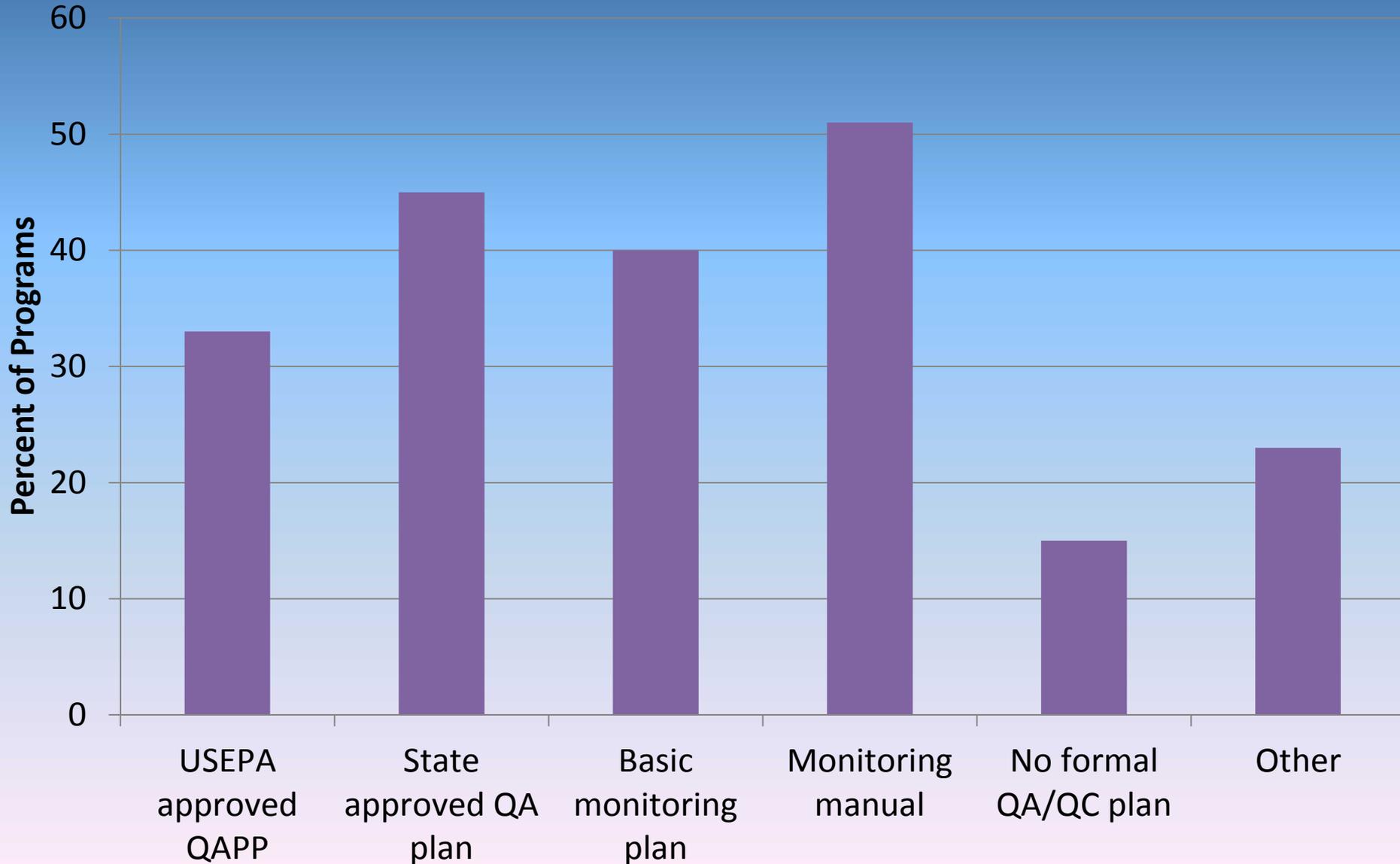


What is Most Challenging to Fund?



How These Programs Document Procedures

n = 87



We have just begun to mine this data and appreciate the opportunity to show these preliminary findings

**Thank You!
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