

Storm Water Survey Update from IFA and ACEC

presentation to
Purdue LTAP Stormwater Drainage Conference
February 9, 2021



IFA Environmental Programs

1. State Revolving Fund Loan Program

- Low interest loans
- Municipalities
- Wastewater & drinking water infrastructure



2. Indiana Brownfields Program

- Low interest loans
- Municipalities
- Assessment and remediation of brownfield sites
- Liability determinations



IFA Environmental Programs

3. Water Resources and Infrastructure Planning Program

- Regional Water Supply and Demand Studies
- Water Loss Audits
- Lead Sampling Program in Public Schools and Child Cares
- Drinking Water (and Wastewater) Infrastructure Needs Survey
- Coordinate Executive Branch activities related to the State's water program

Storm Water Survey: background

- 2019 Storm Water Task Force
- Final Report recommendation – conduct a survey
- 20 rural and urban storm water systems
- Funding, asset management, capital needs, system age and capacity, interaction with state agencies, water quality and quantity trends, long-term planning, institutional constraints, interactions with neighbors
- 2020 IFA ACEC formed small working group

Storm Water Survey: methodology

- Wide range of types of entities managing storm water
 - Urban - MS₄ - city, county
 - MS₄ co-permittee - county, city, town
 - Storm water utility, but not an MS₄ - town
 - Manage storm water, but not a utility - small town - rural
- MS₄ list + municipal wastewater NPDES permit holders = >800

Storm Water Survey: methodology

- No previous study of this kind – lots of questions
- Honed to prevent survey fatigue but still captured desired info
 - Budgeting – O&M vs. Capital improvements
 - Employees – FTE
 - Age, size, count
 - Suggestions for improvement
- Vetted survey with IUPUI and IDEM
- Used online survey tool

Storm Water Survey: responses

- 107 surveys
- Counties, cities, towns
- Equally distributed statewide
- Range of job titles



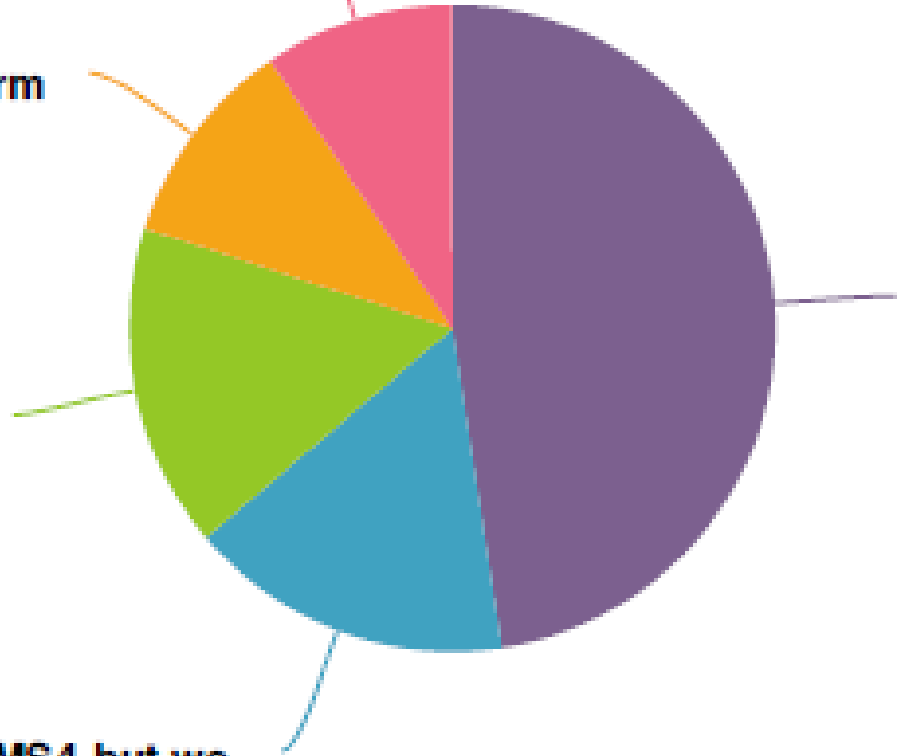
How is storm water managed in your community?

10% Other

11% No entity manages the storm water in our community.

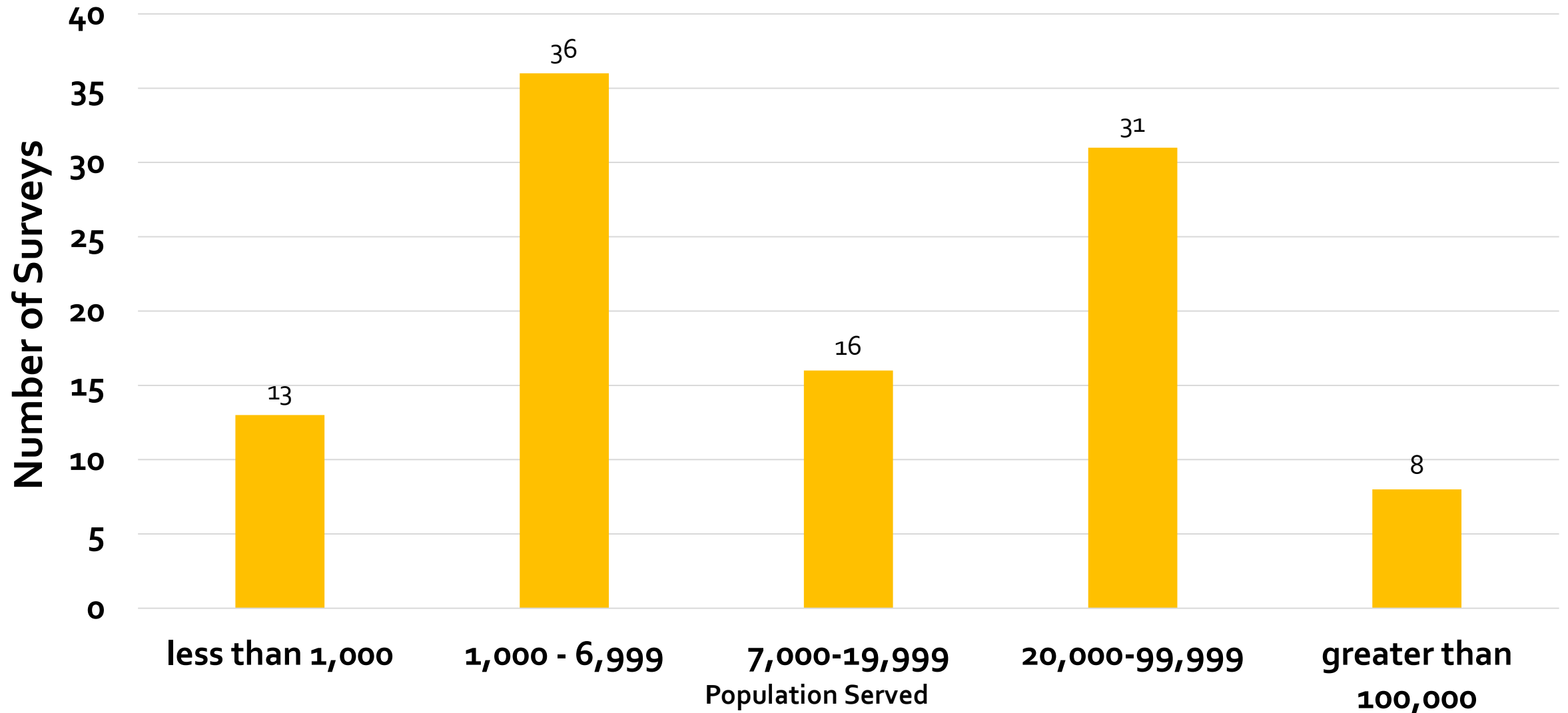
16% We are not an MS4 and we do not operate a storm water utility, but we handle our storm water needs as part of our wastewater utility.

16% We are not an MS4 but we operate our own storm water utility (that is separate from the wastewater utility).

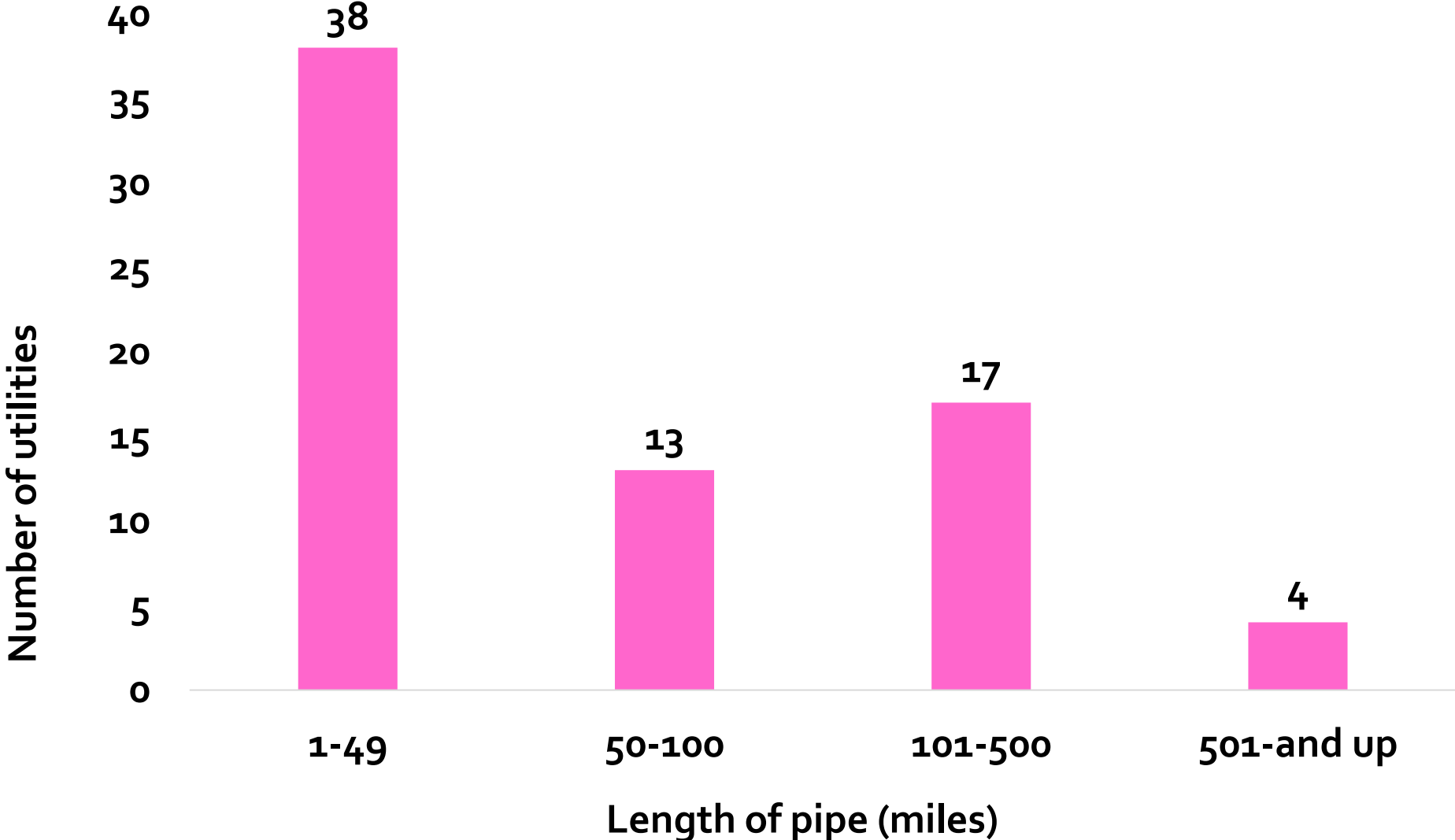


48% We are a Municipal Separate Storm Sewer System ("MS4") or we are part of /co-permittee on another entity's MS4.

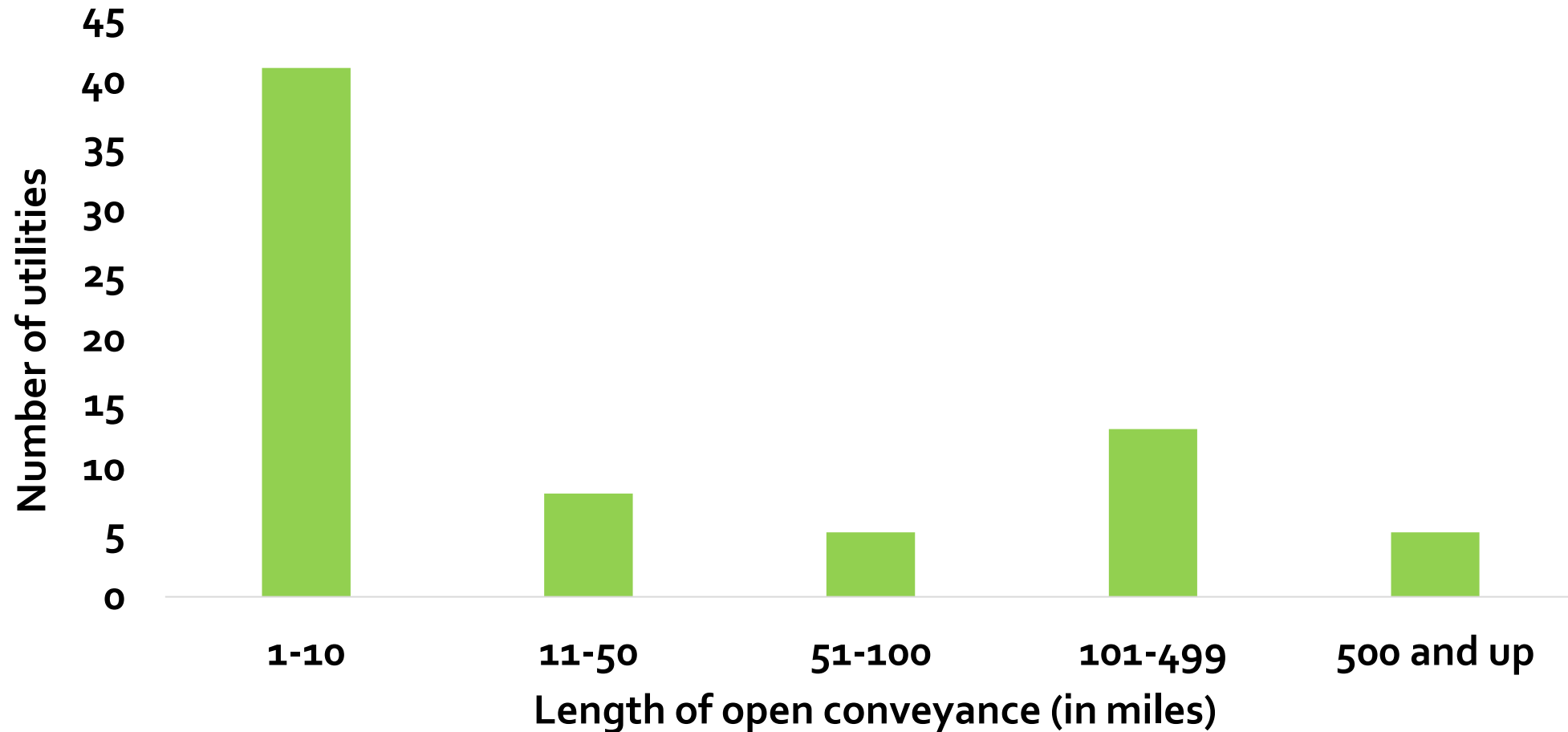
Storm Water Survey: population of respondents



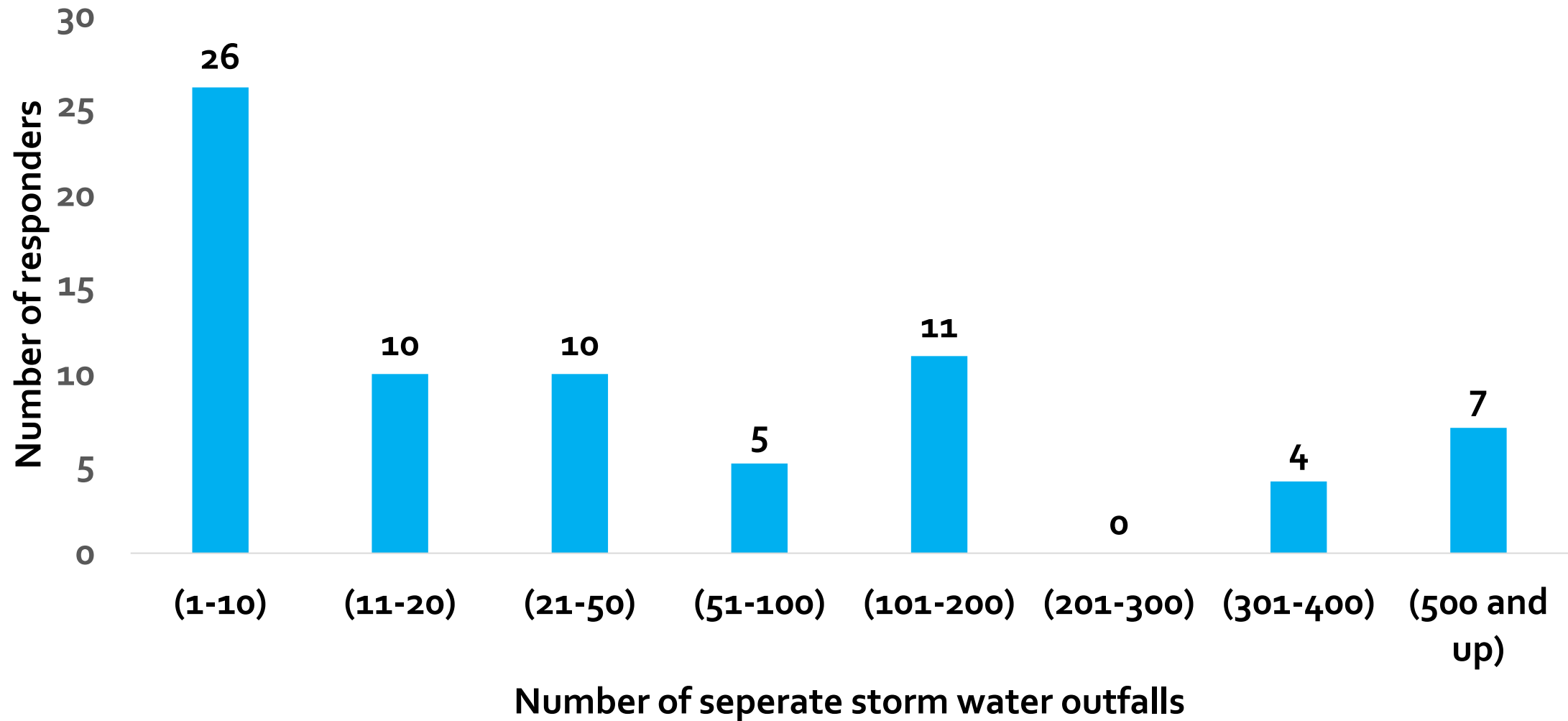
What is the total estimated length of pipe in your system?



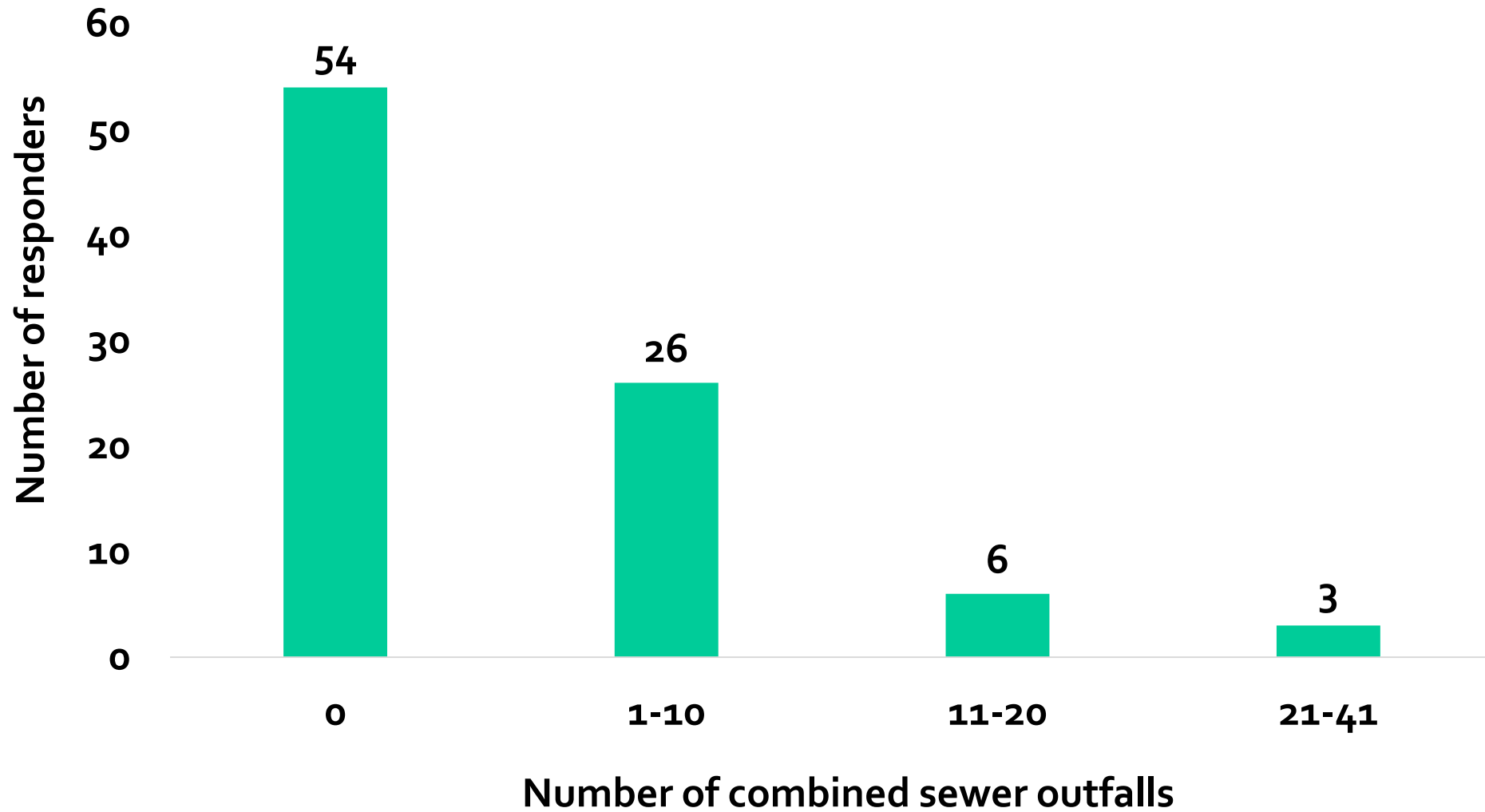
What is the total length of open conveyance (ditch)?



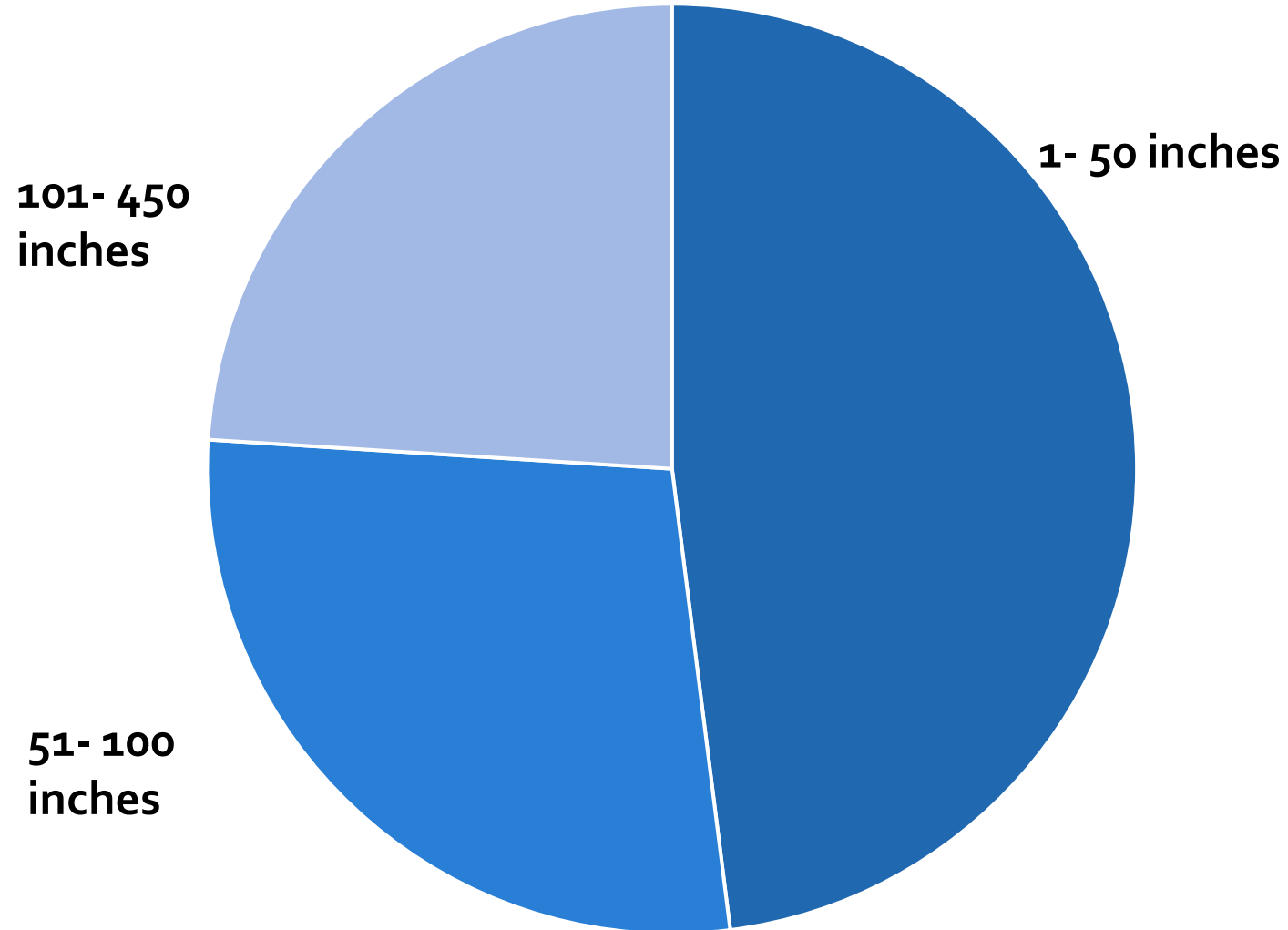
How many separate storm water outfalls?



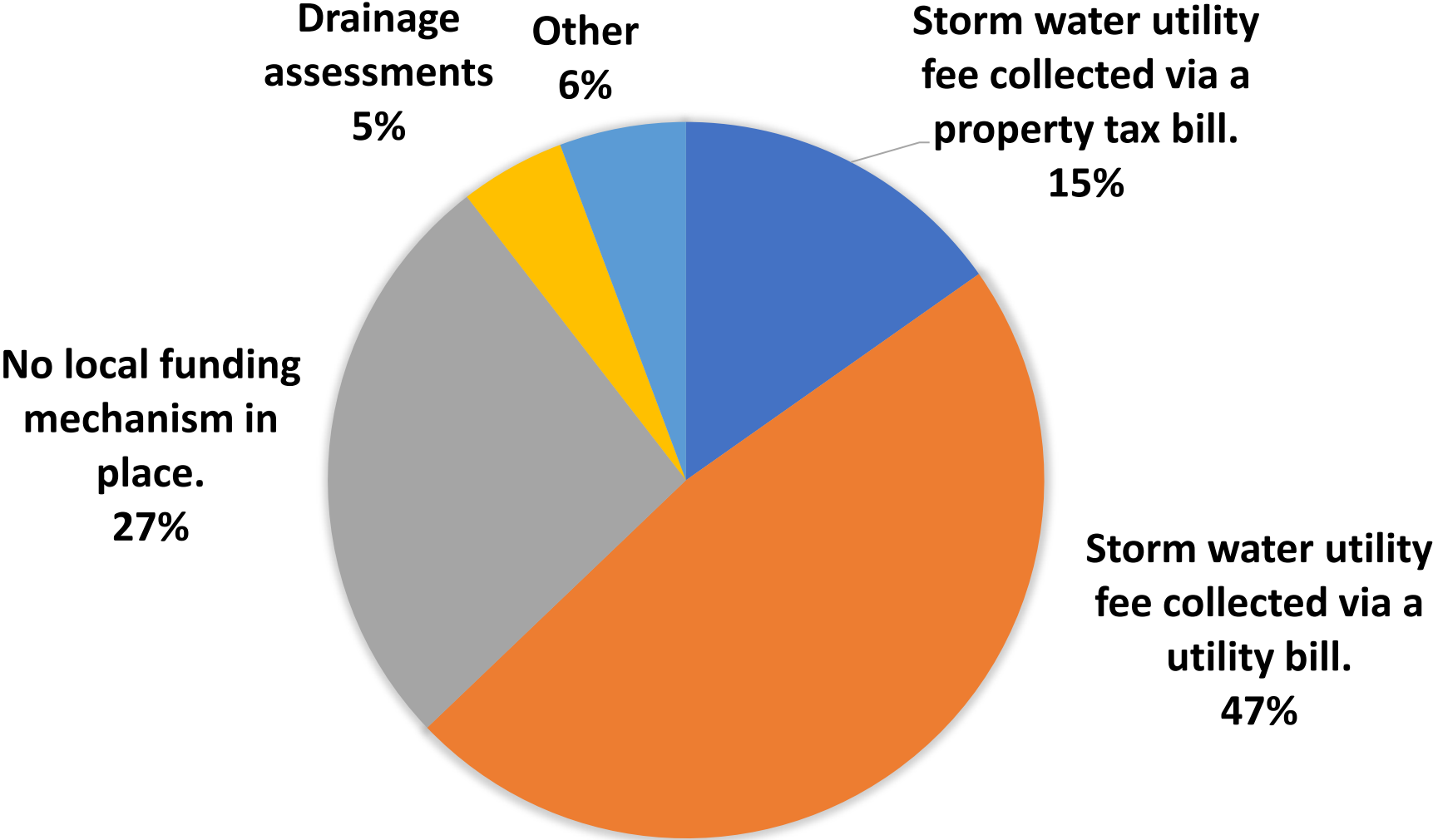
How many combined sewer outfalls?



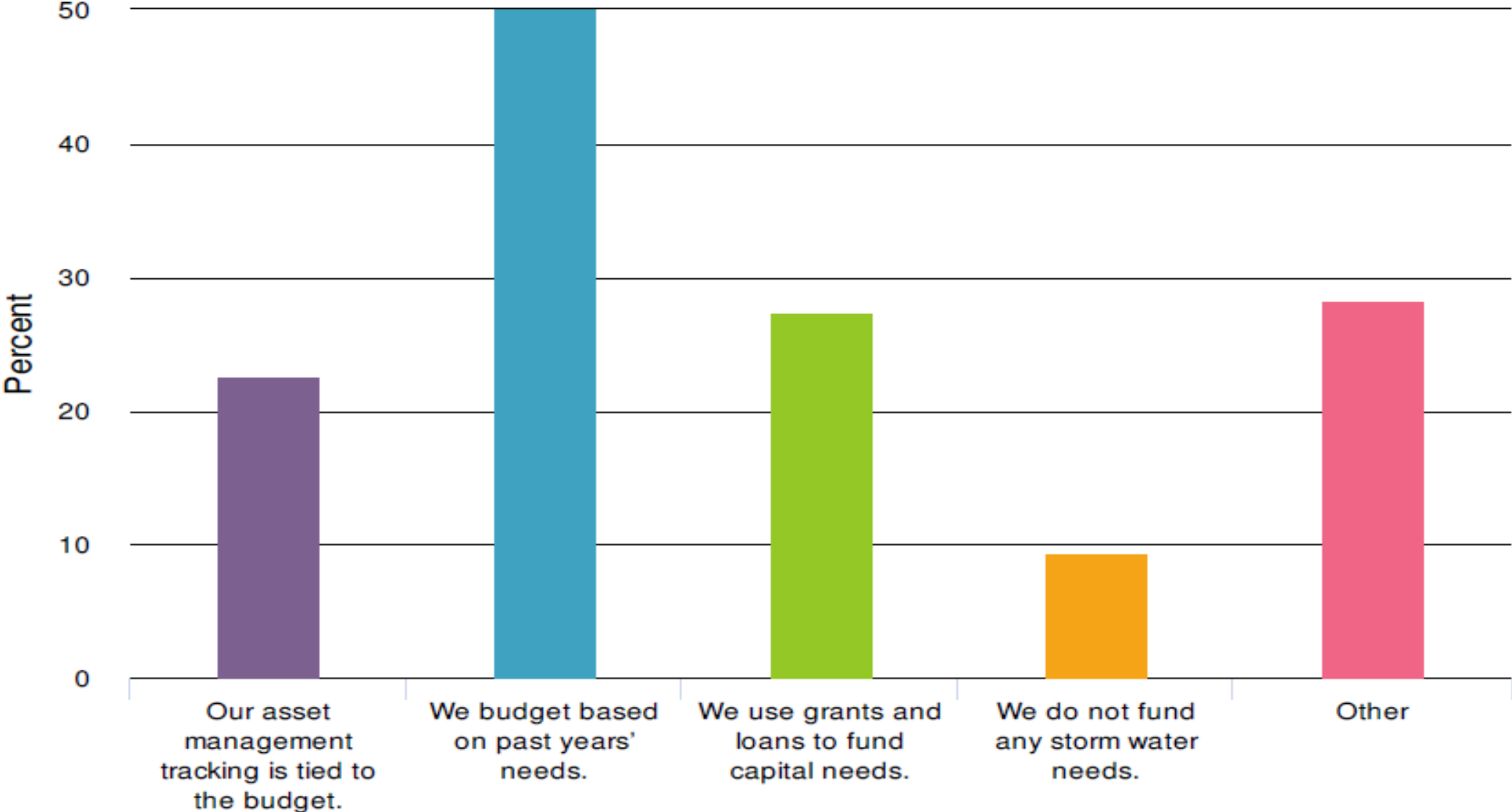
Largest diameter of storm pipe?



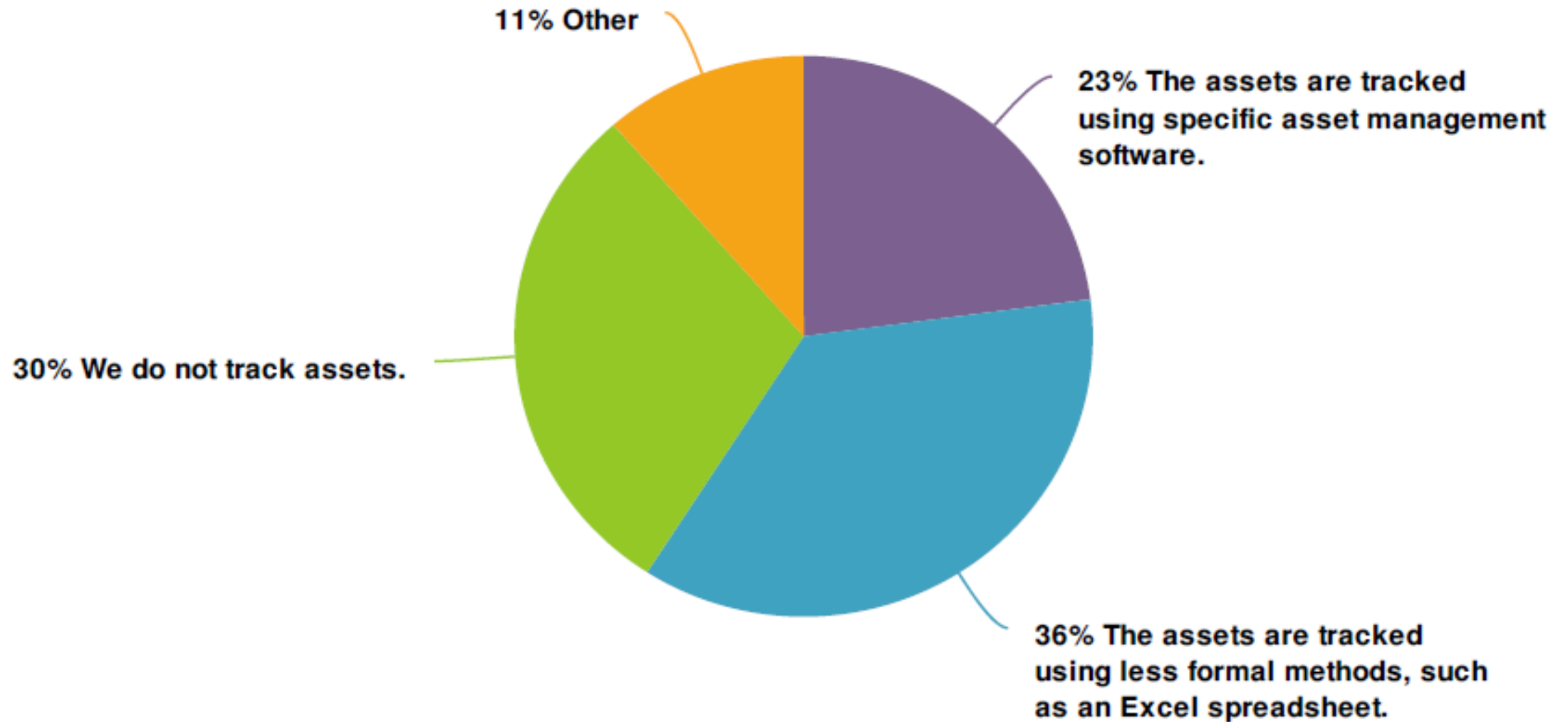
How does your community fund storm water needs?



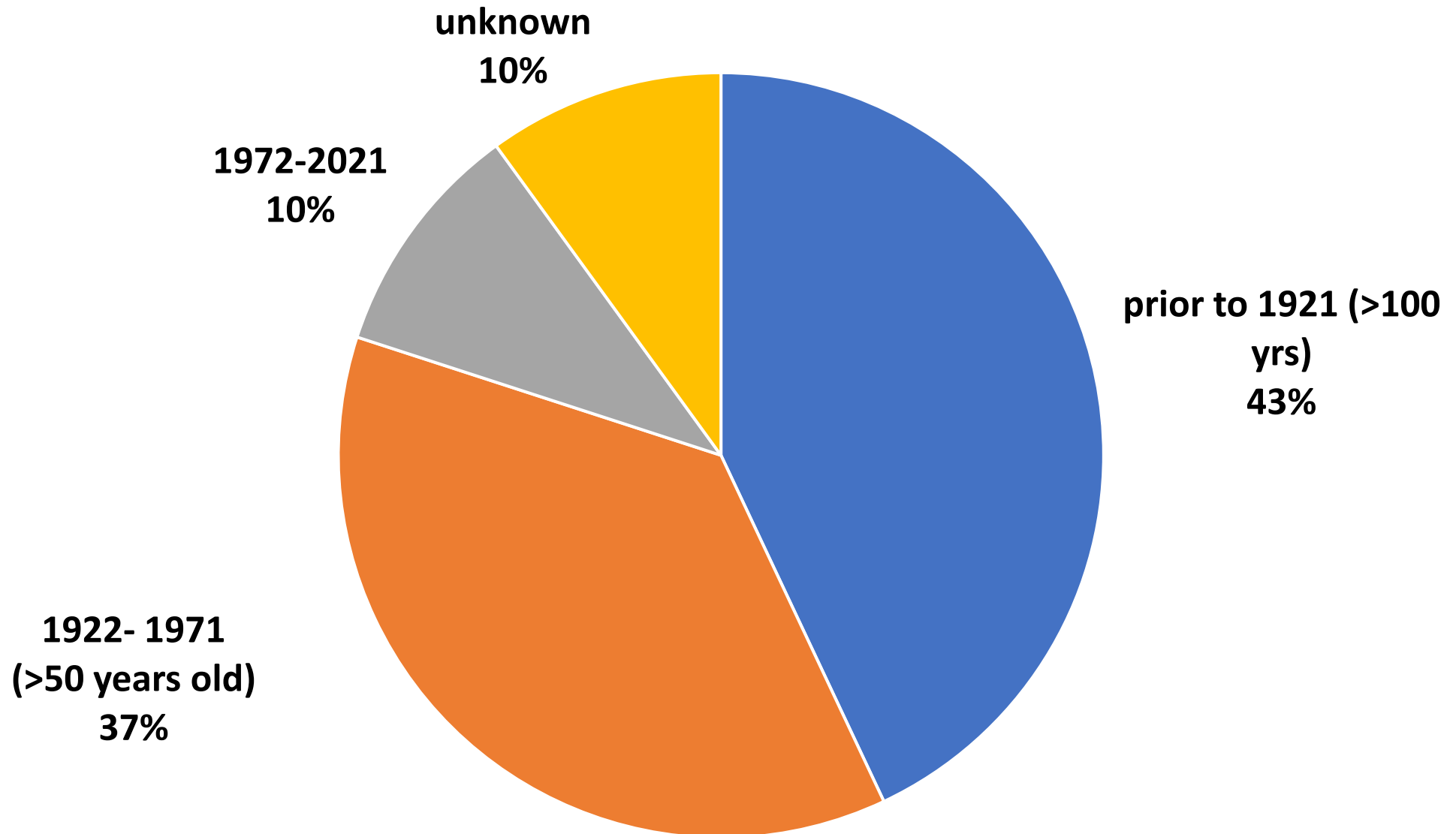
How does your community budget for needs?



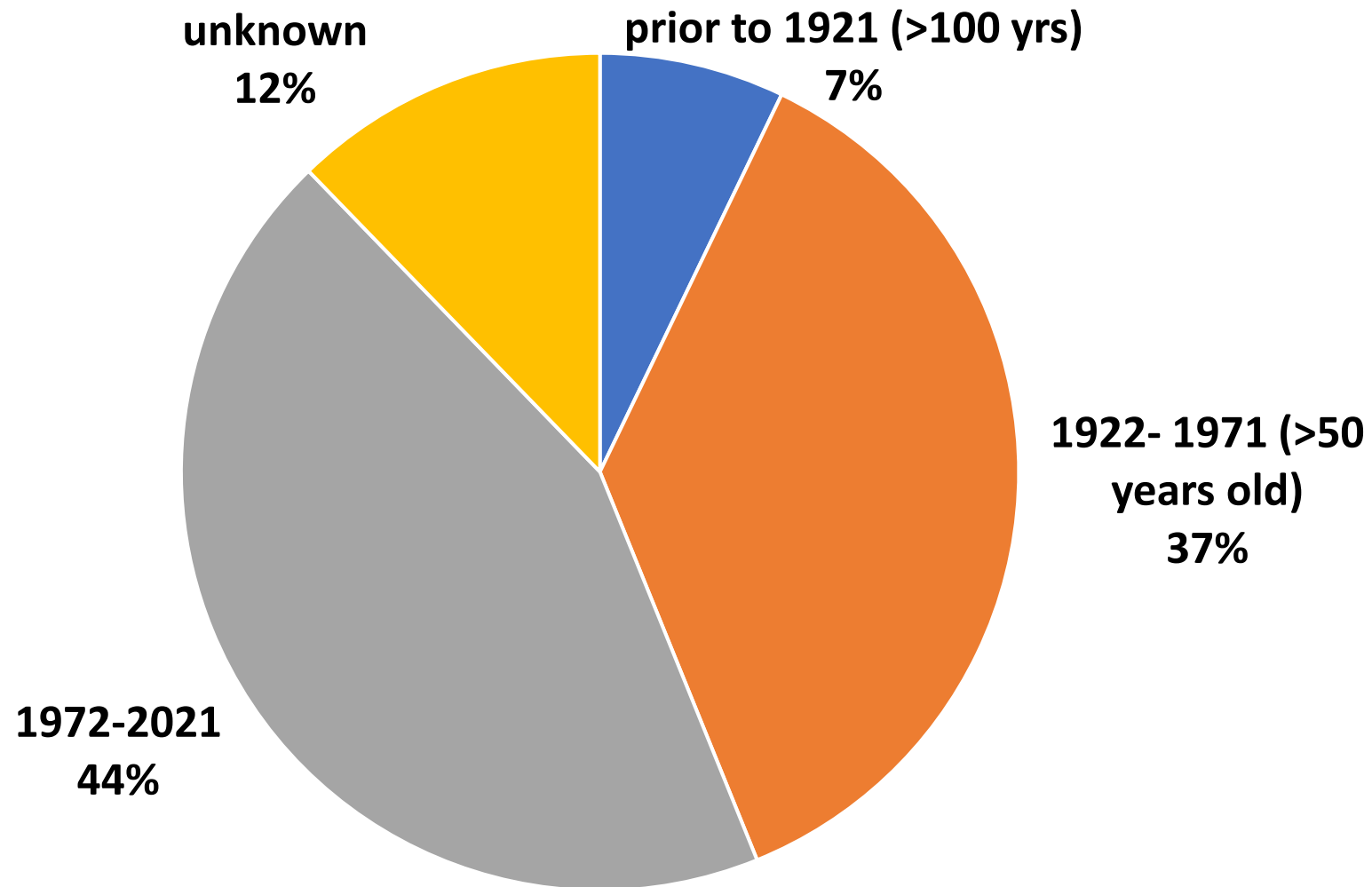
How does your community track assets?



Age of oldest component?



Age of most of the components?



Storm water infrastructure priorities?

Deteriorated infrastructure – high

Undersized infrastructure – medium/high

Lack of infrastructure – medium

Infrastructure to address water quality – low/medium

Other: maintenance of infrastructure

Water quality priorities?

Sediments – high

E.coli/bacteria – medium/high

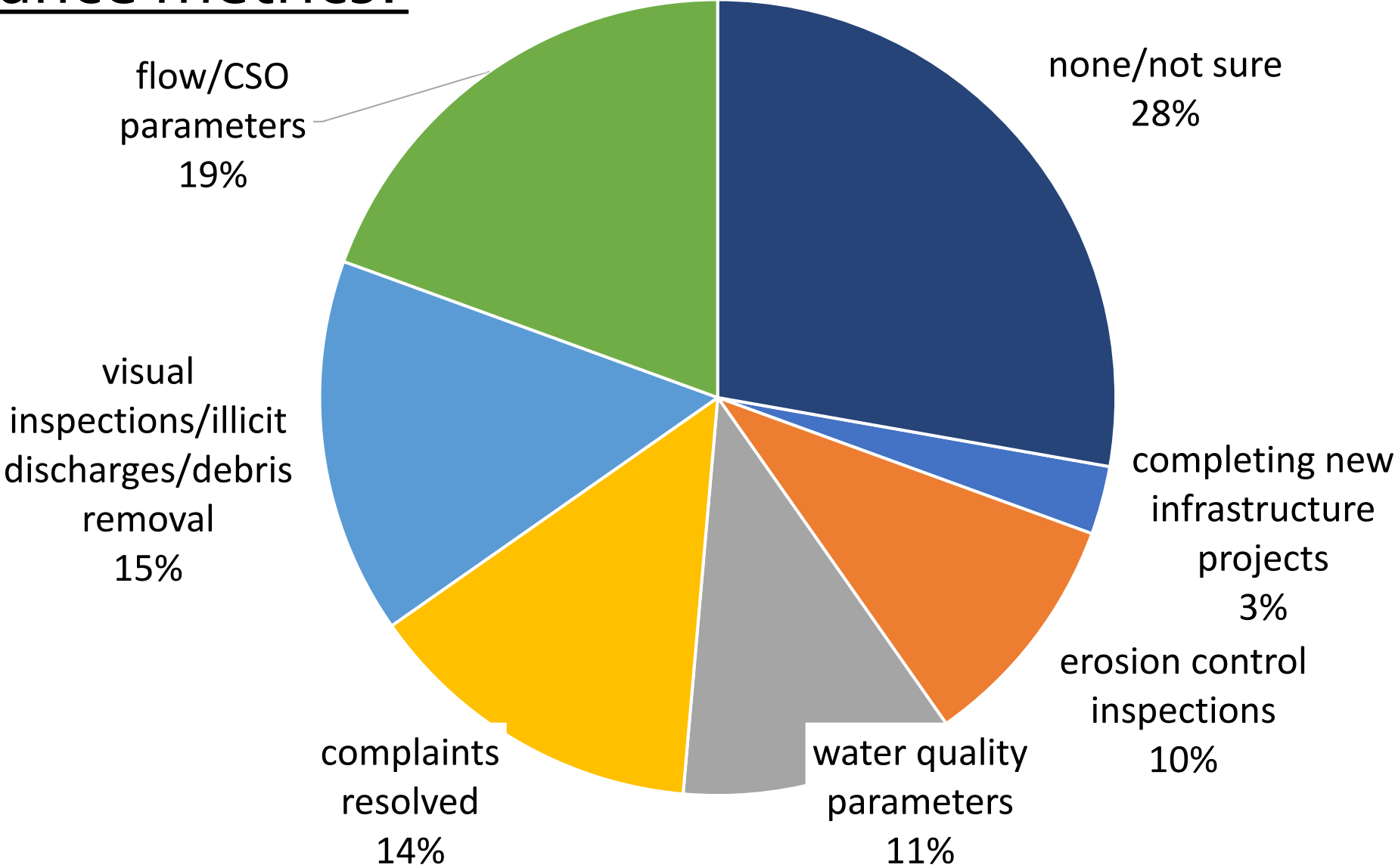
Trash/floatable solids – medium/high

Nutrients – low/medium

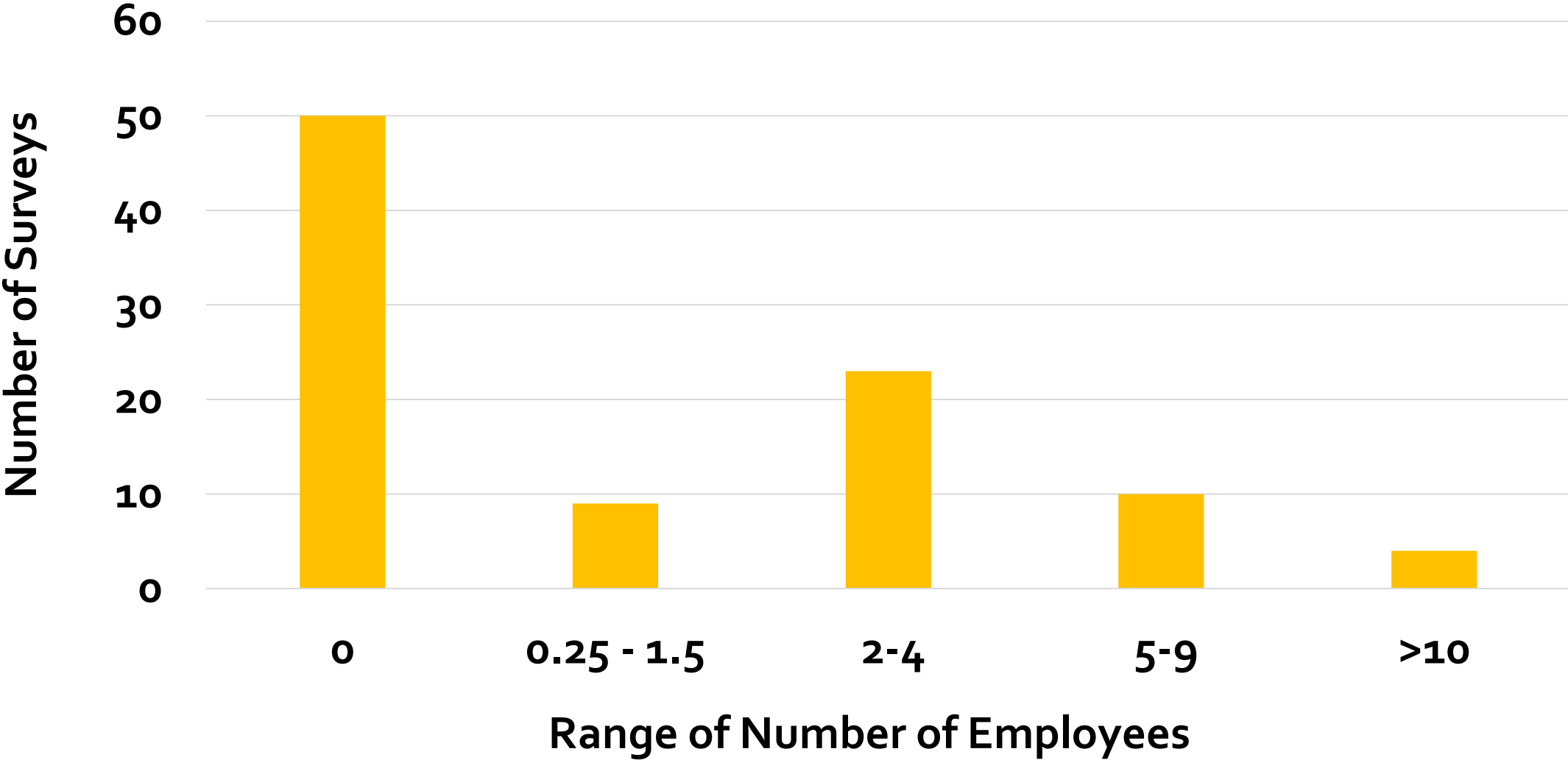
Oils – low

Metals – low

Performance metrics?



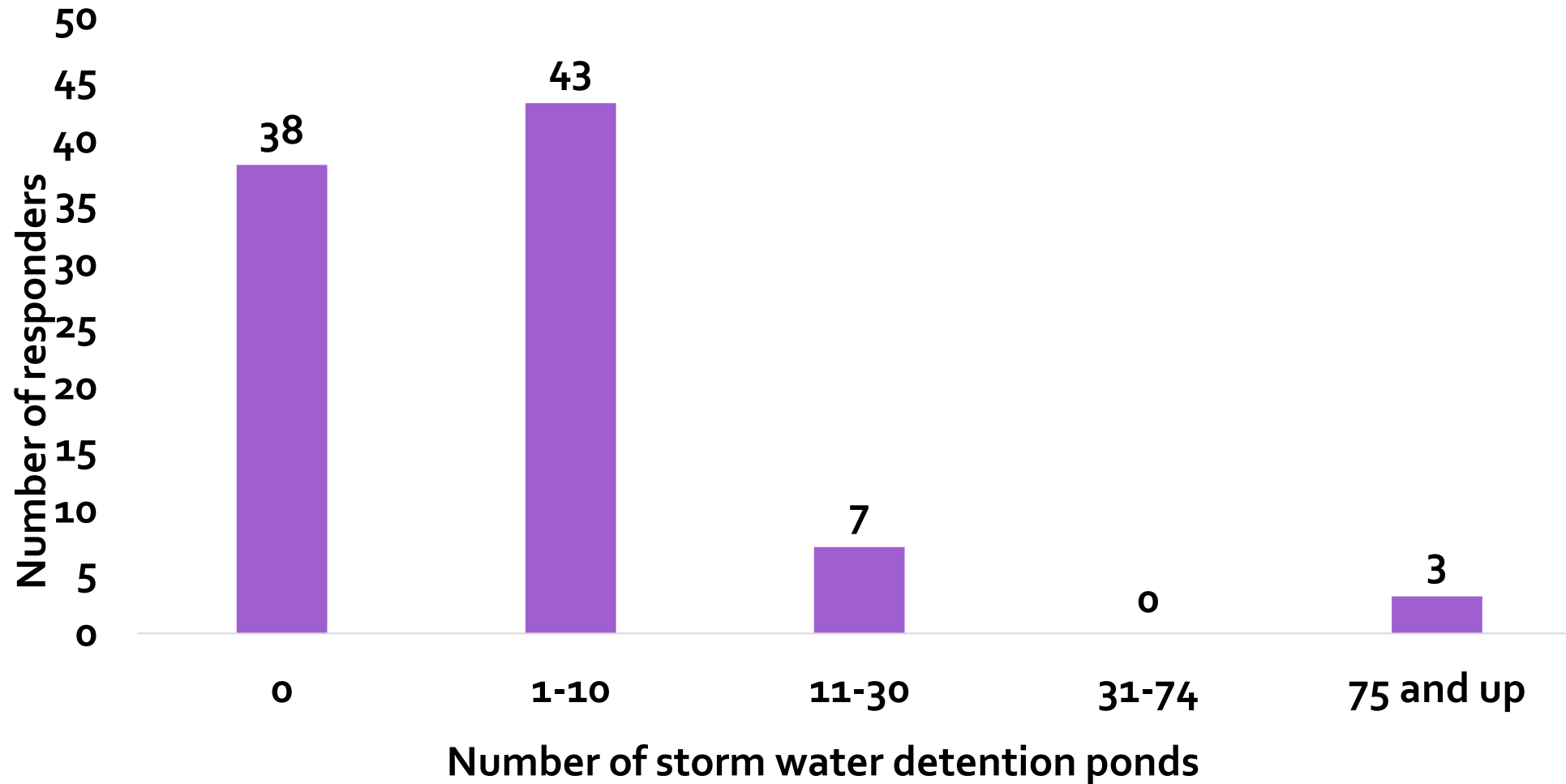
Number of full-time storm water employees?



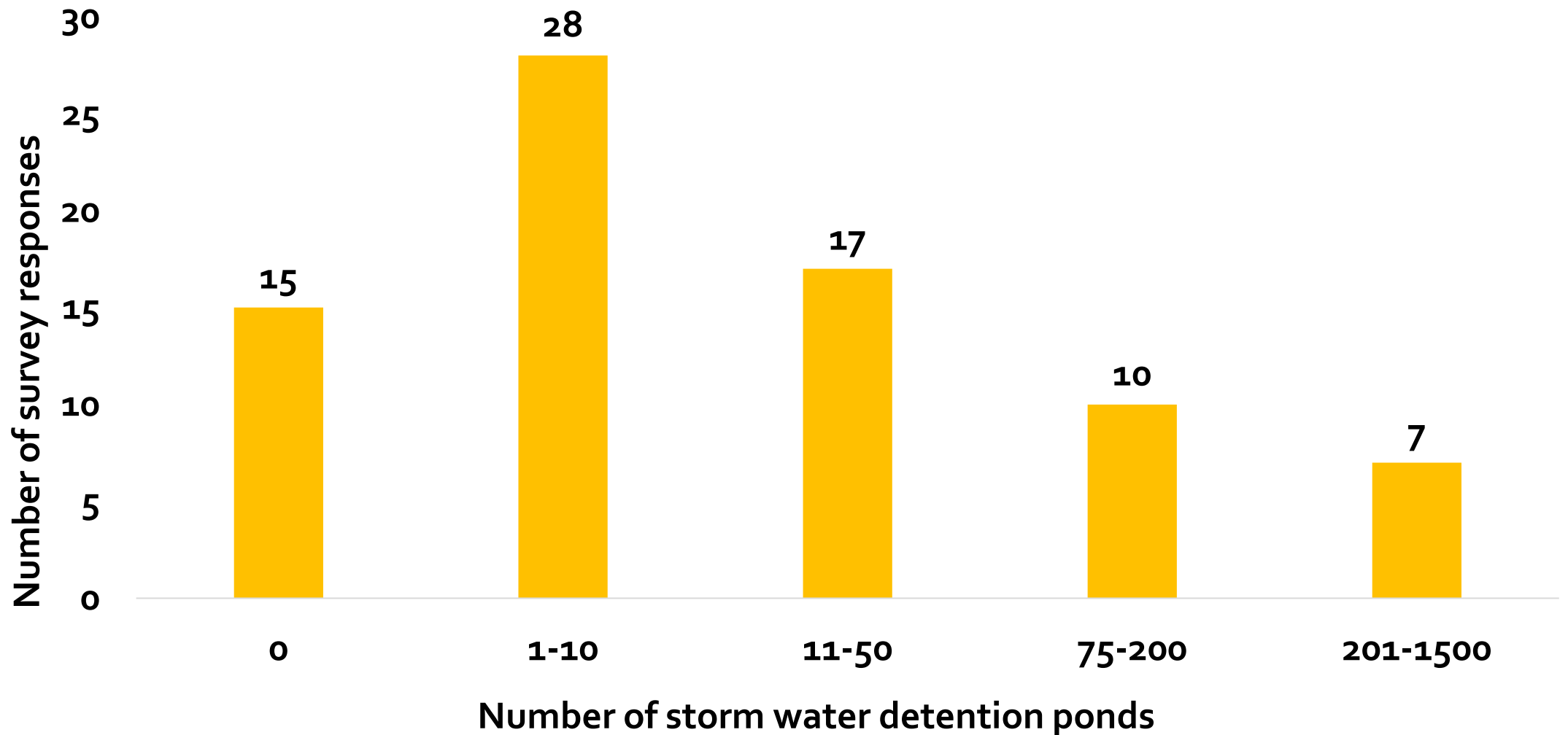
Constraints?

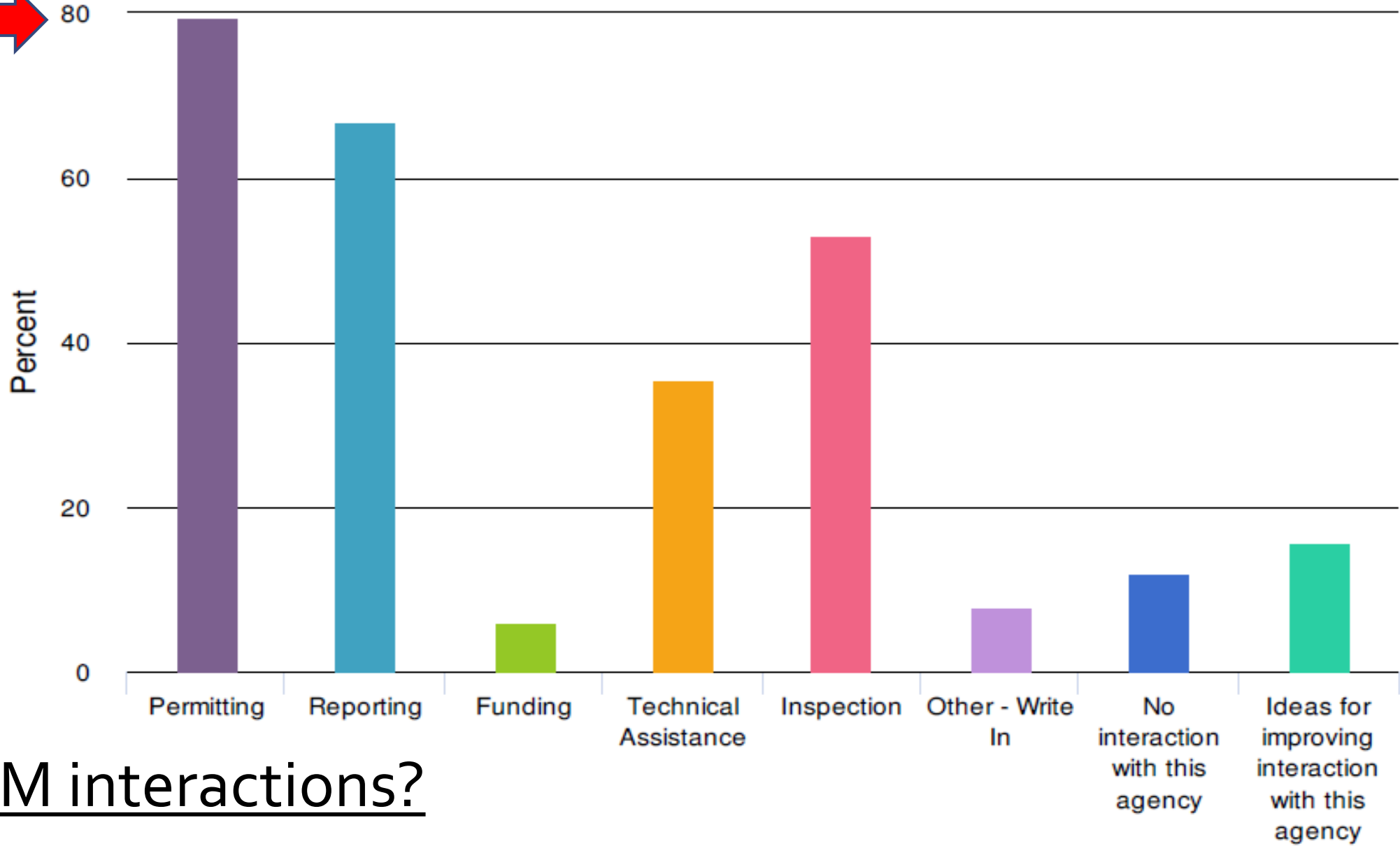
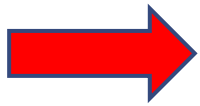
- 73% Limited staffing in storm water department
- 72% Limited or no budget
- 35% No support for Low Impact Development/Green Infrastructure
- 34% Difficulty enforcing existing storm water ordinances
- 33% No local support to increase storm water utility rates
- 24% No local support for forming a storm water utility
- 7% We have no constraints

How many storm water detention ponds are in your system that are owned by your community?

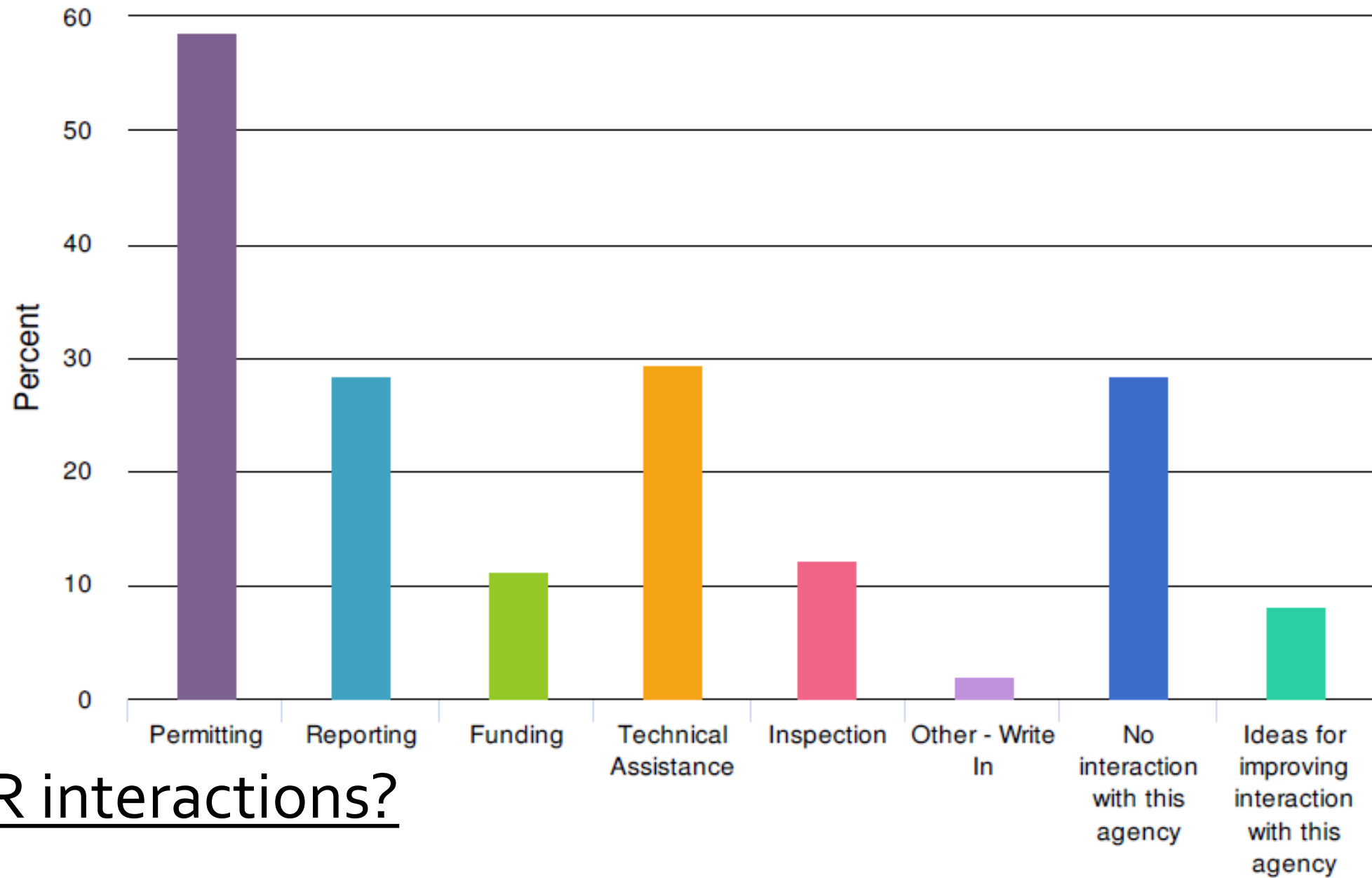


How many privately-owned storm water detention or retention ponds are in your system?

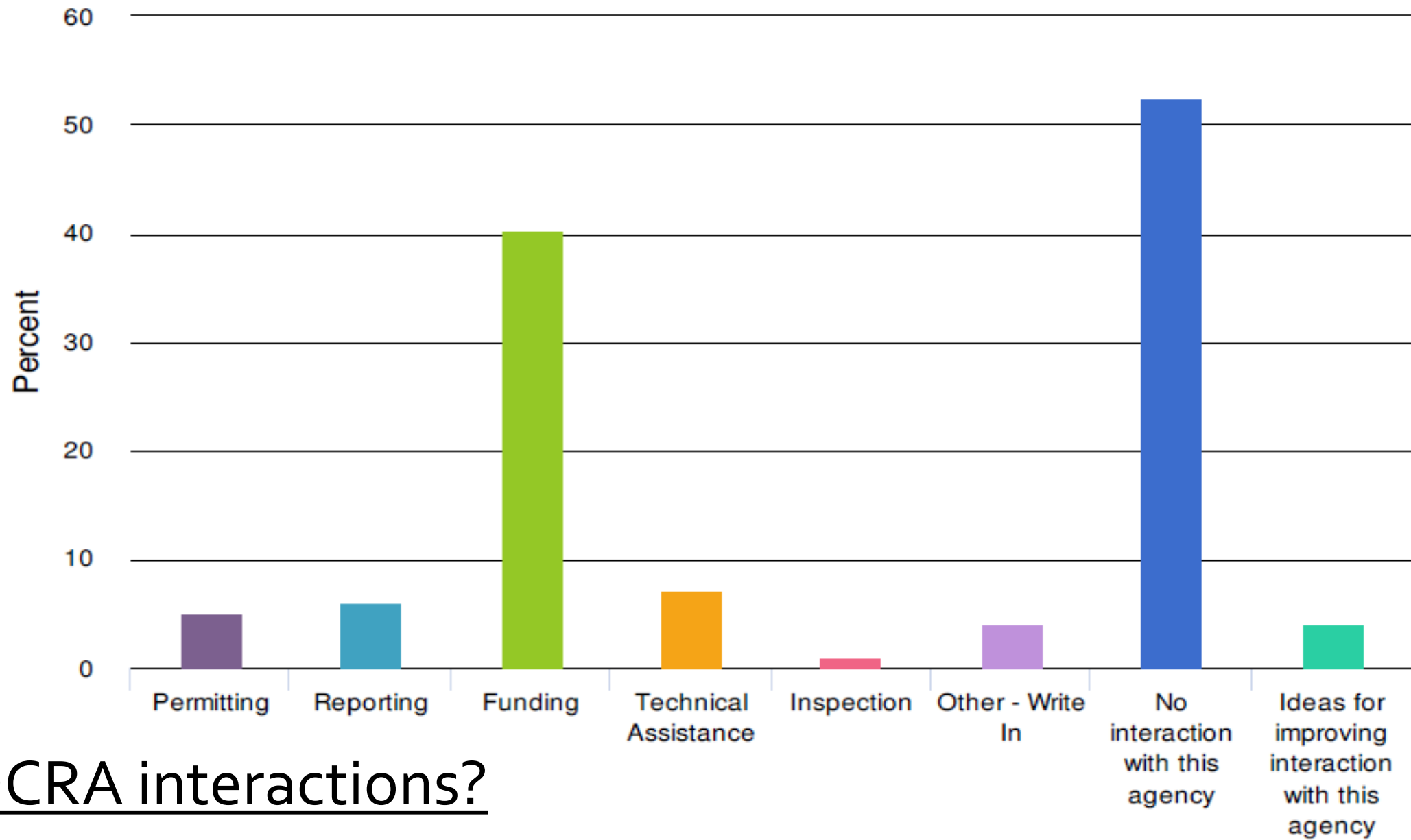




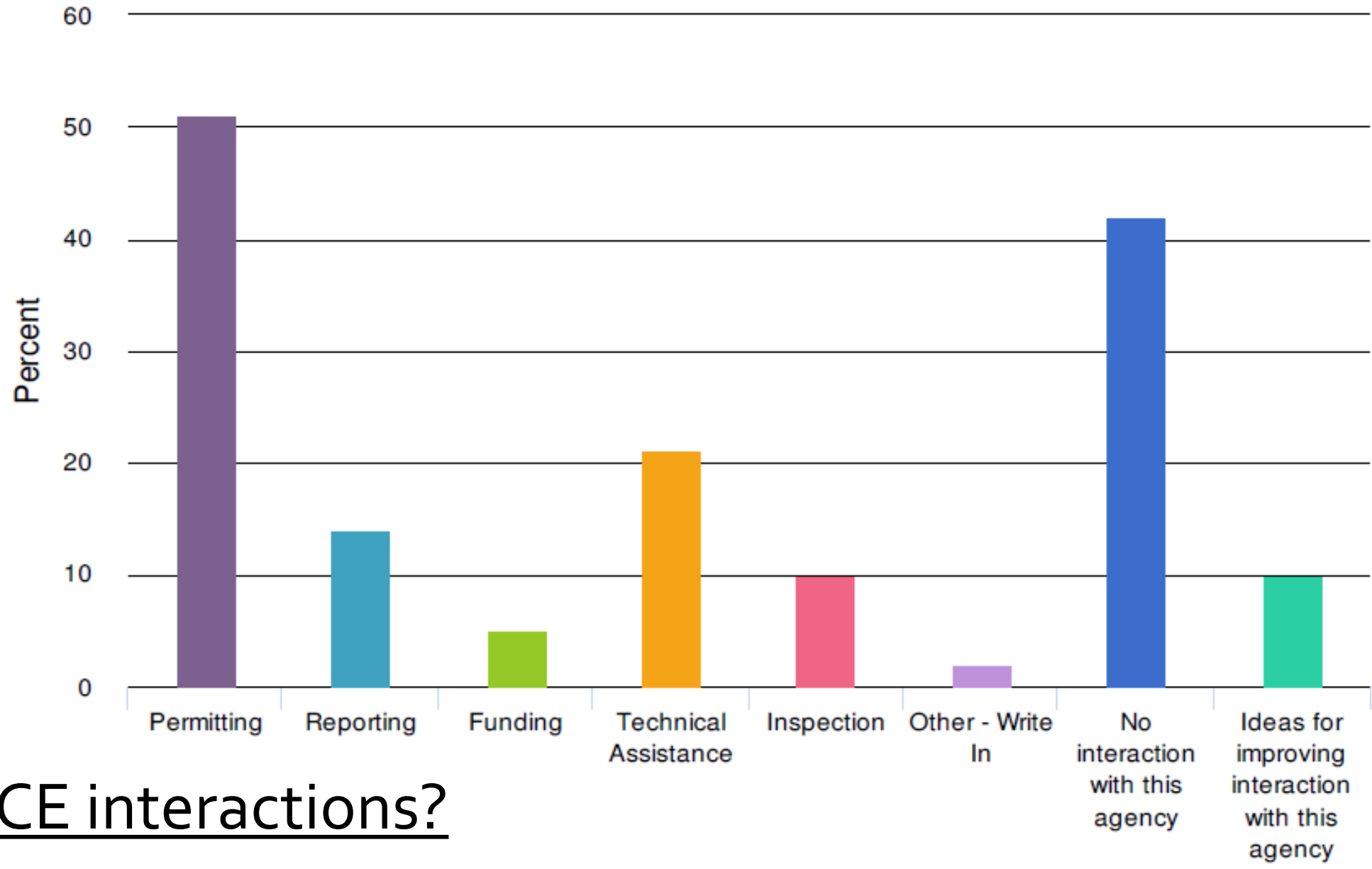
IDEM interactions?



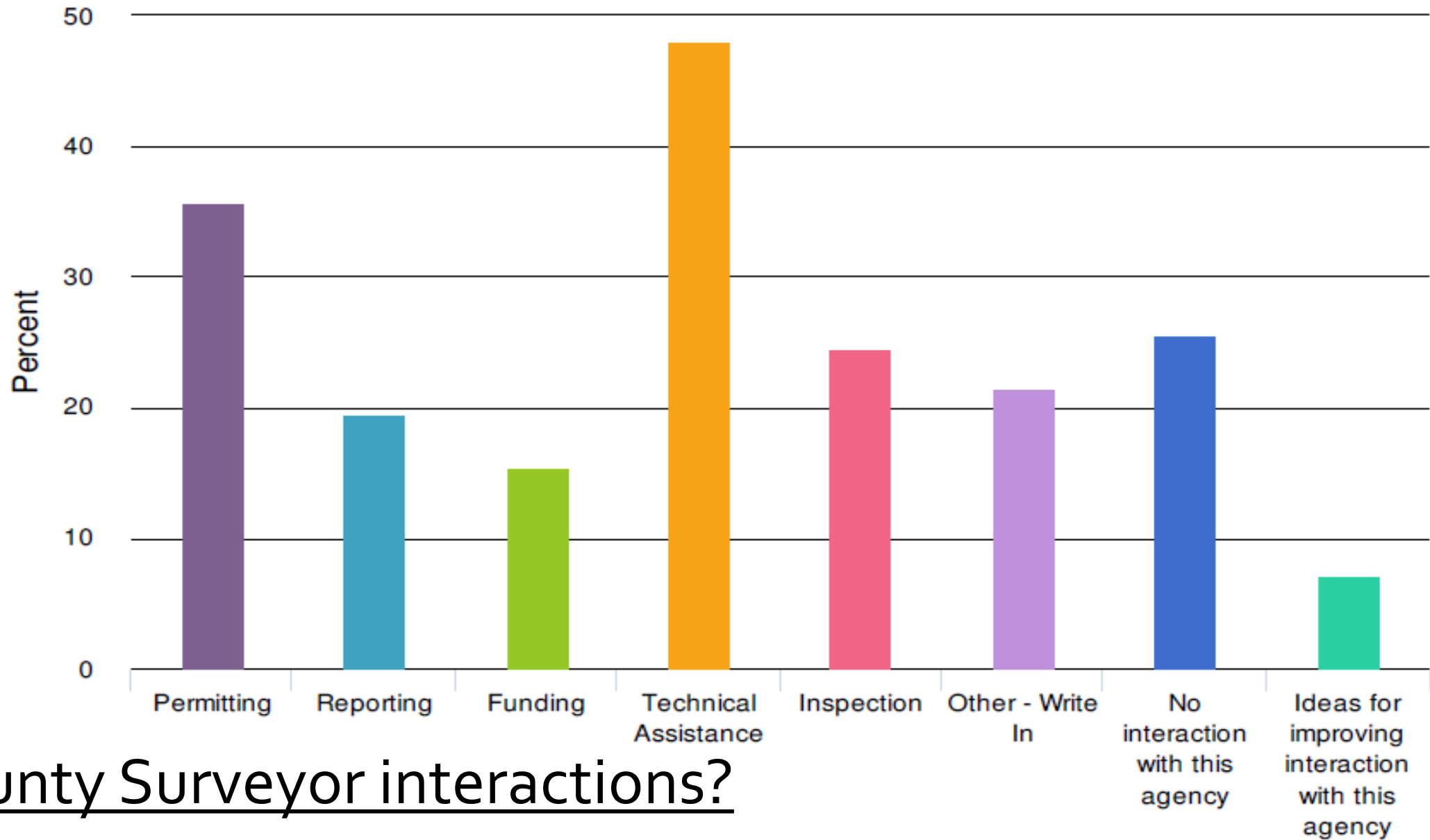
IDNR interactions?



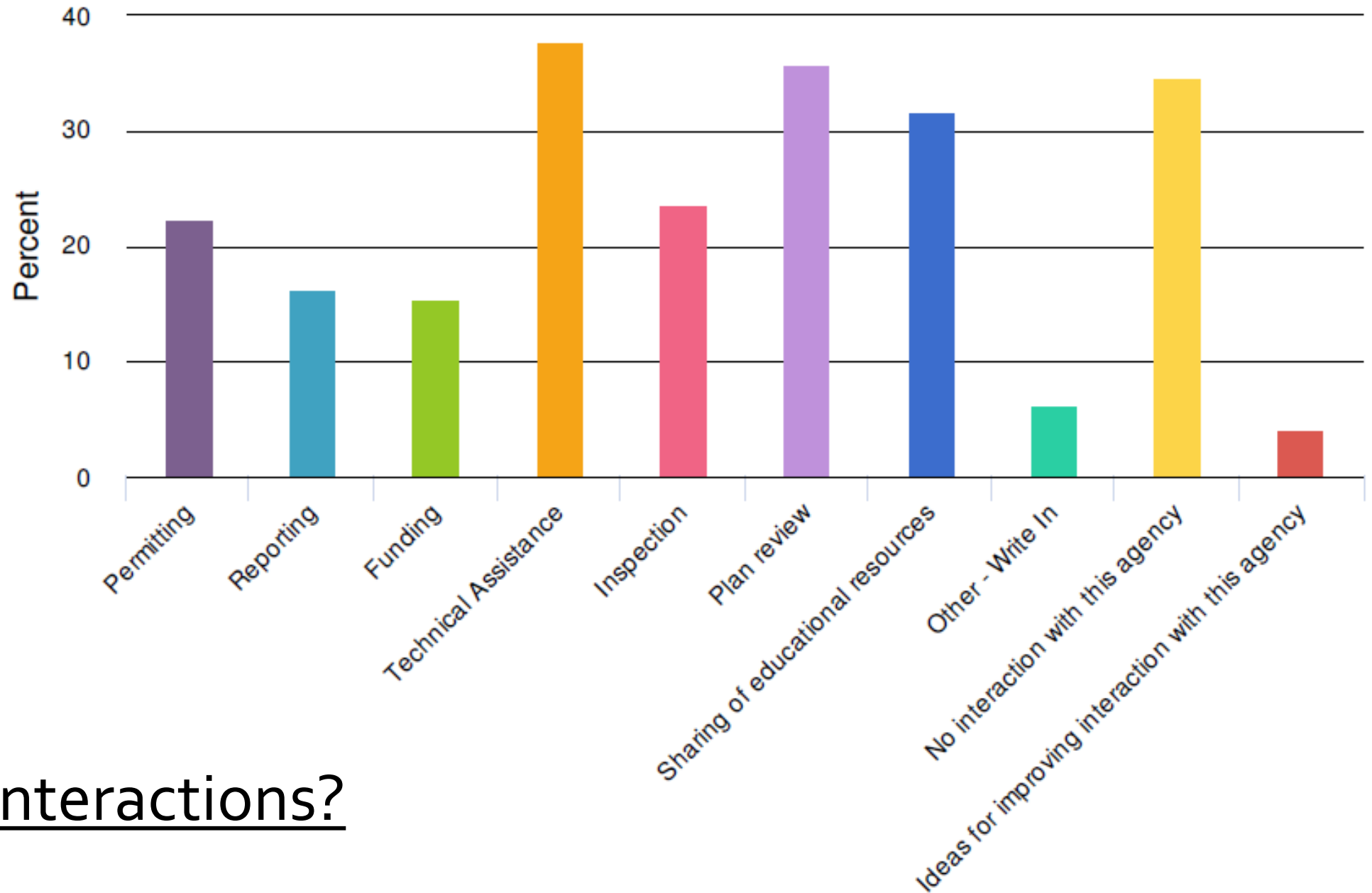
IOCRA interactions?



USACE interactions?

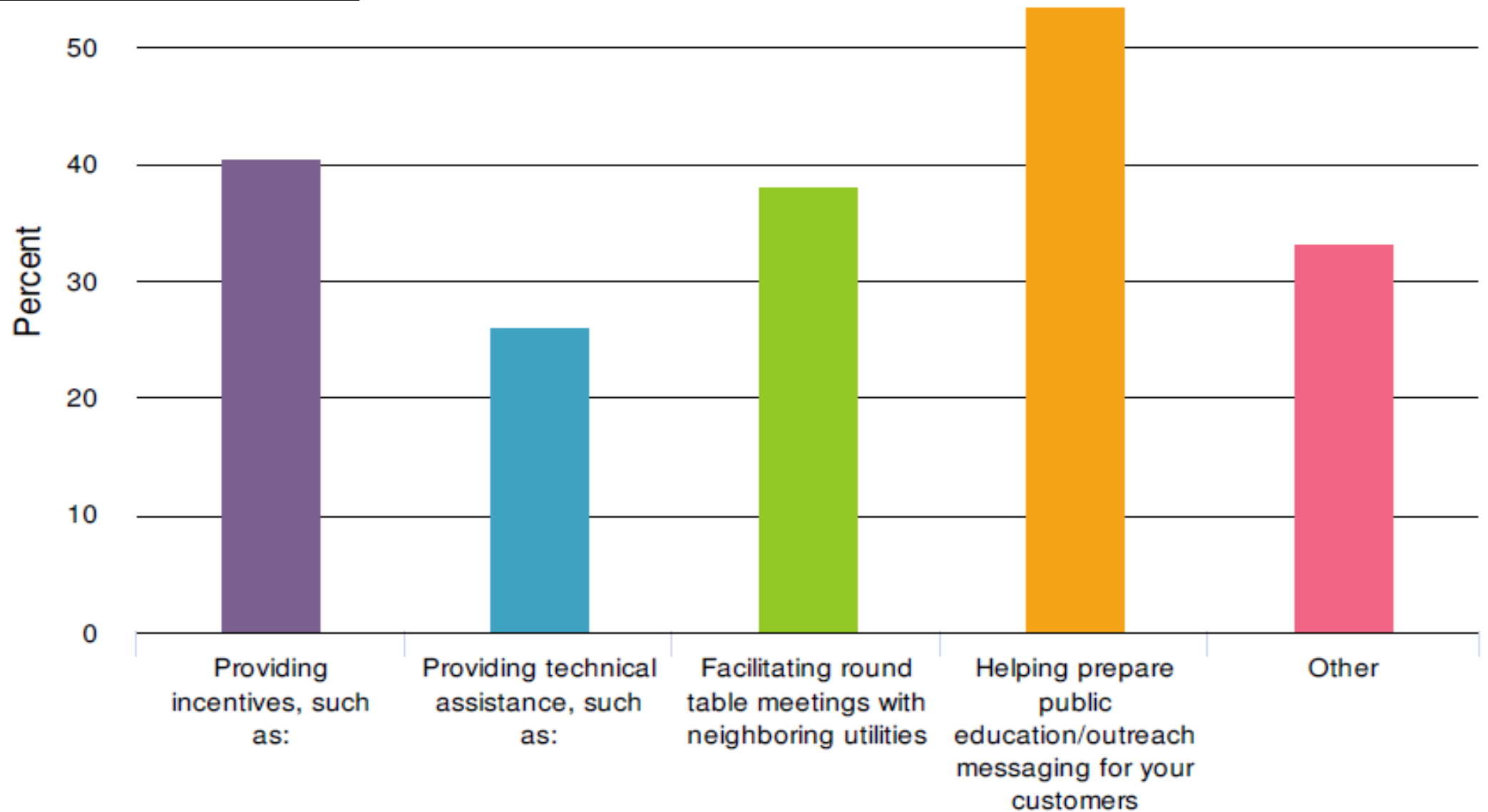


County Surveyor interactions?



SWCD interactions?

State assistance?



Storm Water Survey: Next Steps

- Finish data analysis
 - Q: what data are you most interested in knowing more about?
- Issue final report
- Post to IFA website
- Share with other agencies
- All survey responders will receive an email with link to report

Questions?

IFA Water Resources and Infrastructure Planning Program

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