



**May 21, 2020**

**Viabile Utility Reserve Committee  
of the State Water Infrastructure Authority**  
*Department of Environmental Quality  
Division of Water Infrastructure*





## **Agenda Item B**

### **Approval of Meeting Minutes**





## Agenda Item C

### Distressed Criteria Review



# *Distressed Criteria Overview*

- Five bill language elements (Green)
- Criteria developed by the Authority (Purple)
- Financial criteria by the Local Government Commission (Red)
  - Some financial criteria provided for context and how parameters could be used
  - Some financial criteria may also represent other areas (i.e., organizational, infrastructure)



# *Spreadsheet Overview*

- **Criteria Overview**
  - Each element represented
  - Threshold values – if exceed = Yes
  - All weighted same
- **Criteria Scoring**
  - Total thresholds exceeded for each utility
  - Missing data noted
  - Number of systems above overall score threshold
- **Key Data**
  - Data values
  - Some additional data not used as criteria
  - Missing data



# Spreadsheet Overview

- System names not shown
  - Each system provided an alias
  - Alias provides context
- Alias elements

LGU Type	Random Number	Utility Type	Viability Info
TC – Town / City	1,	Both – drinking water and sewer	NV – not viable
C – County	2,	DW – drinking water only	LD – likely distressed
S – Special Purpose	3,	WW – wastewater only	AAA – highly rated
	etc.	Bulk – primarily bulk provider	





# *Criteria Discussion*

- Review what parameters are used
- Scoring discussion
  - Thresholds
  - Scoring – exceed threshold or not
  - Incorporate more scaling?
- Parameters may reflect multiple focus areas
  - Unit Assistance List – Organizational, Financial, and/or Infrastructure?
  - Compliance – Organizational, Financial, and/or Infrastructure?



# *Criteria Discussion*

- Demographics
  - Population
  - Population change
- Compliance
- Infrastructure
- Rates
- Financial





# *Population*

- Population
  - <10,000 population (bill language)
  - Additional weighting for very small systems?
- Population Change
  - North Carolina – just over 4%
  - Currently use 1%
  - Median for towns / cities: +/- 1.8%
  - Highest 10<sup>th</sup> percentile: +/- 23%
  - Lowest 10<sup>th</sup> percentile: +/- -19%



# *Compliance Data*

- **Wastewater Systems (NPDES and non discharge)**
  - Number of limit violations
  - Percent of non-compliant inspections
  - Flow moratorium
- **Collection Systems**
  - Number of SSOs
  - Number of SSO/mile
  - System without any inspections or violations
- **Drinking water systems**
  - MCL violations
  - Treatment technology violations



# *Compliance Data*

## Pros and cons of using compliance data as an indicator of a distressed LGU

- Pros

- Compliance data is available through DEQ's Division of Water Resources
- Non-compliance is an indicator that necessary action by the LGU may not be occurring
- Allows for systematic approach with easily reproducible results

- Cons

- Different levels of noncompliance
  - Notice of deficiency (NOD), Notice of violation (NOV), Civil penalty Assessment
- Not all LGUs have permitted systems
- Some LGUs have multiple systems
- Data may be more indicative of a troubled system, not a troubled LGU

# *Compliance Data*

## Coordination with DWR compliance program

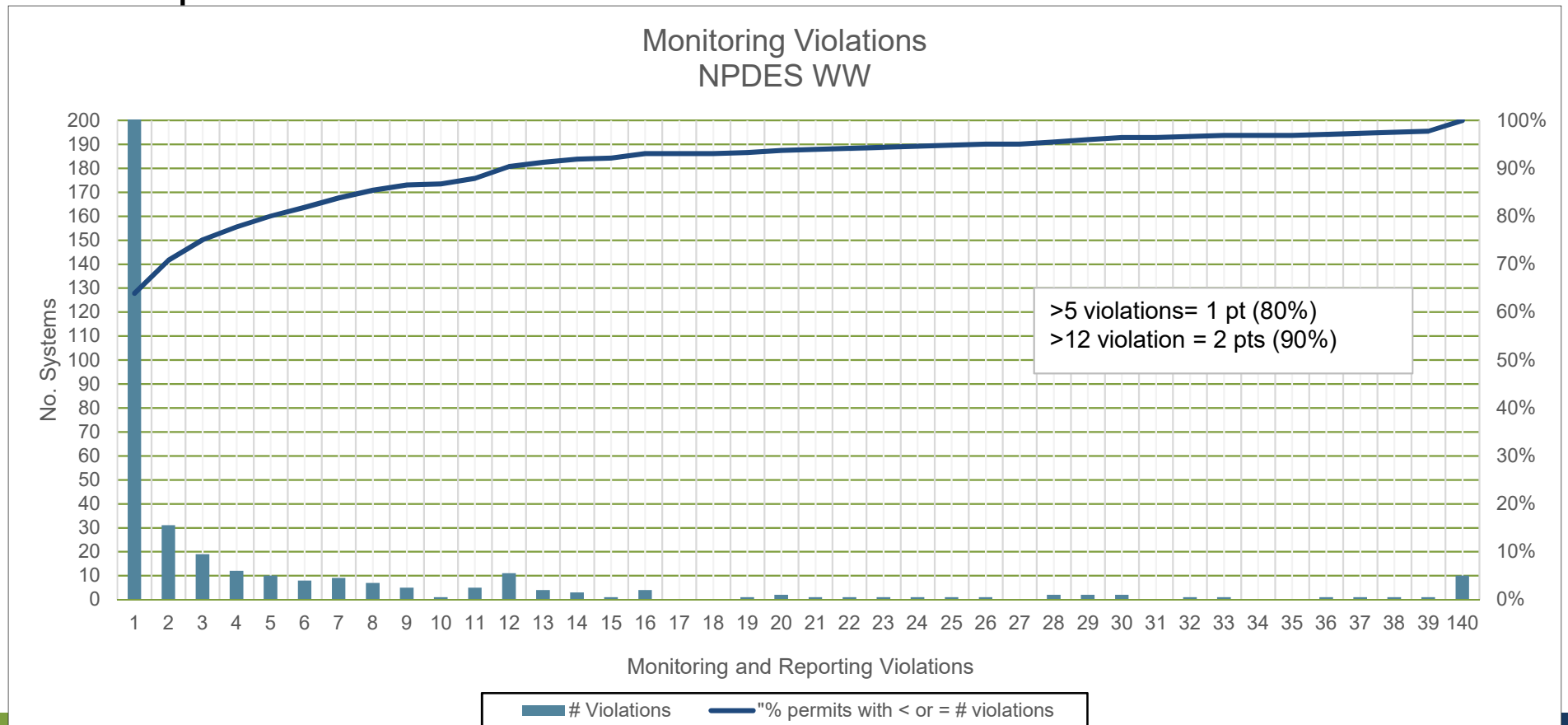
- DWR can provide background for violations not apparent in data
- DWR can provide up to date information on system
- DWI can provide indicator data on system that may be struggling in other areas (financial, organizational)



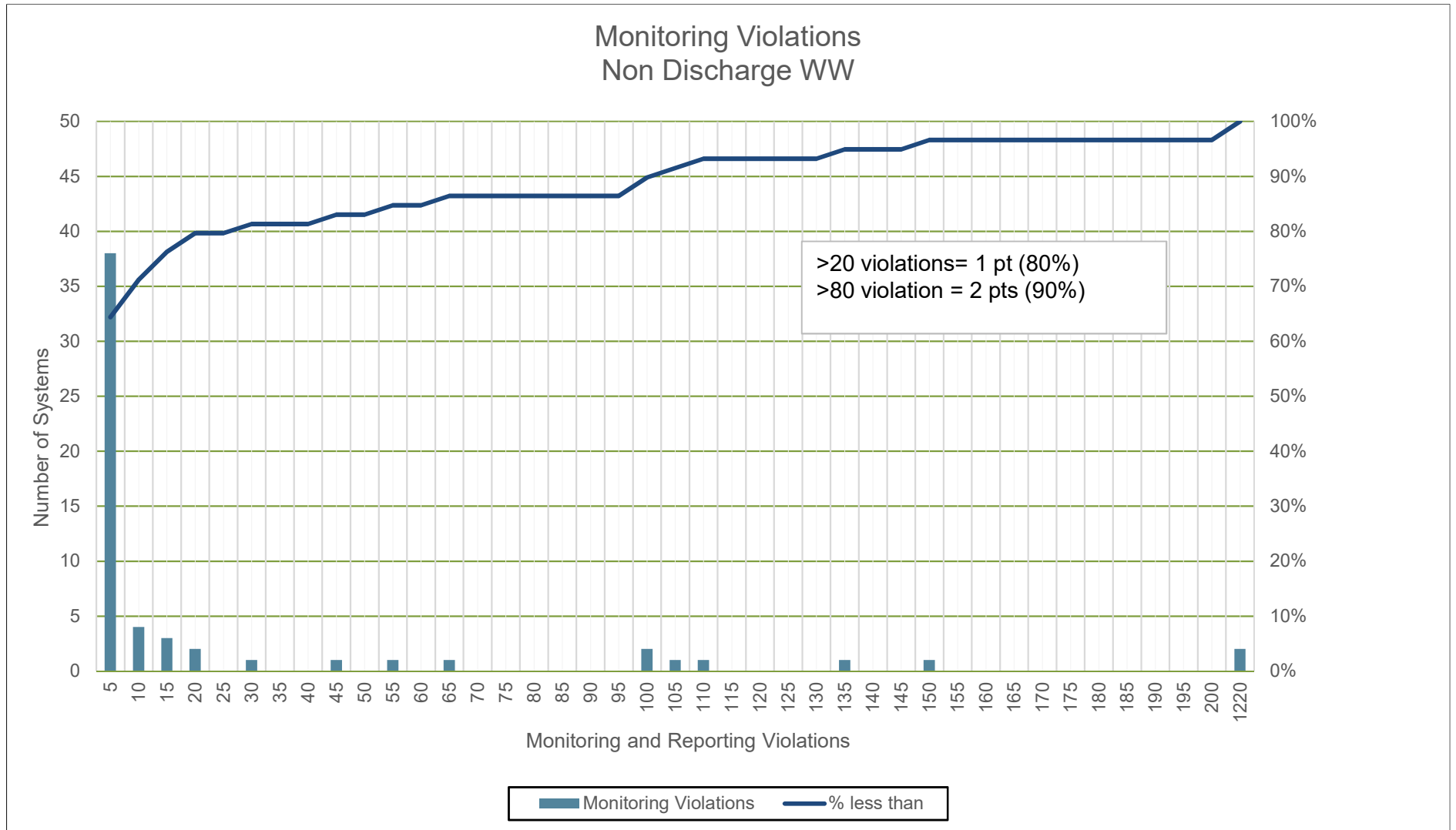
# Wastewater Treatment Considerations

## Limit Violations

- Violations indicate inability of system to meet demand
- Violations may indicate inability of owner to operate, maintain, or adapt



# Wastewater Treatment Considerations



# *Wastewater Treatment Considerations*

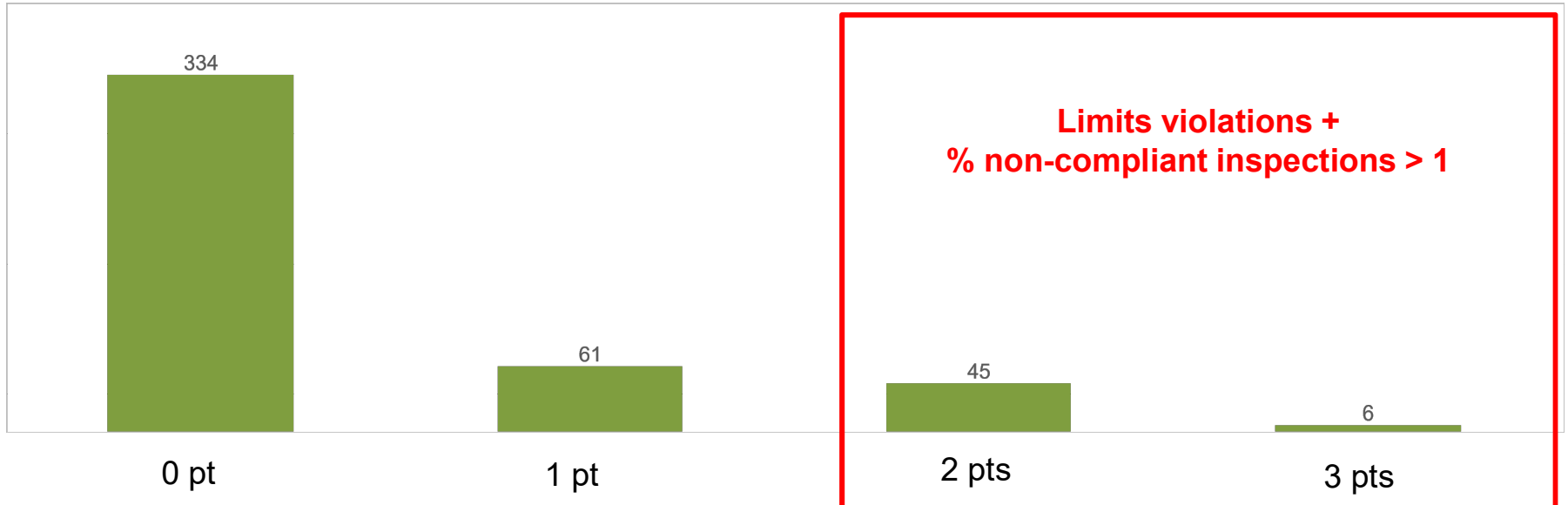
- Non-compliant inspections
  - Violations indicated inability to operate or maintain facility
  - Minimum inspection requirements
    - Larger (major) systems inspected 1 every 2 years
    - Smaller (minor) systems inspected 1 every 5 years
- Systems with >49% of inspections that resulted in violations were identified to be at risk (1 priority point)



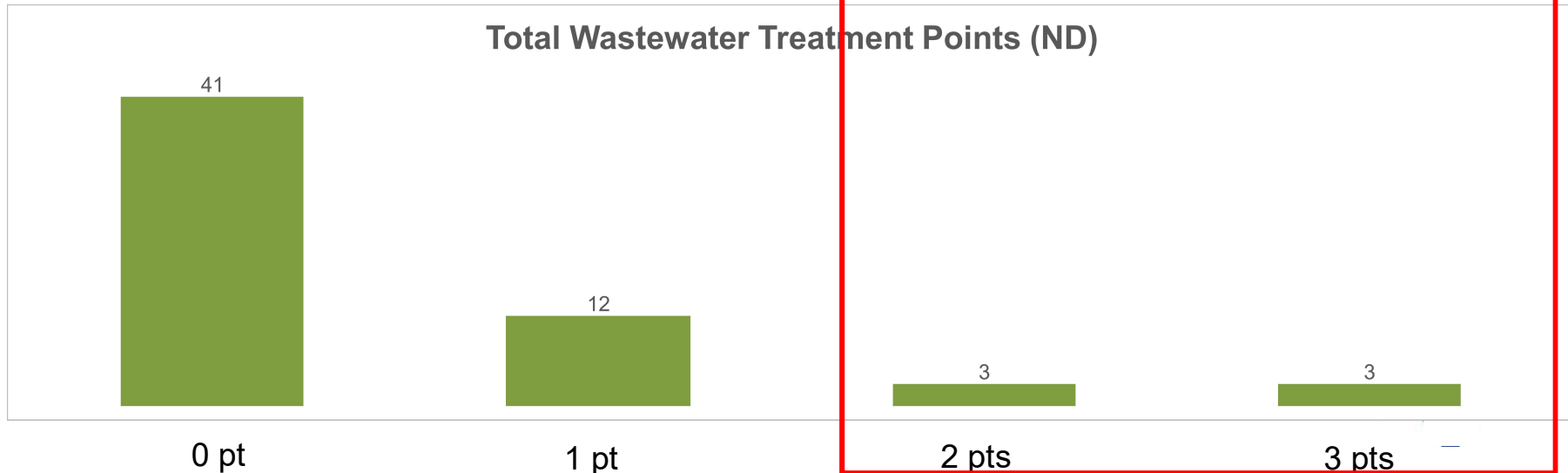


# Wastewater Treatment Considerations

## Total Wastewater Treatment Points (NPDES)



## Total Wastewater Treatment Points (ND)



# *Wastewater Treatment Considerations*

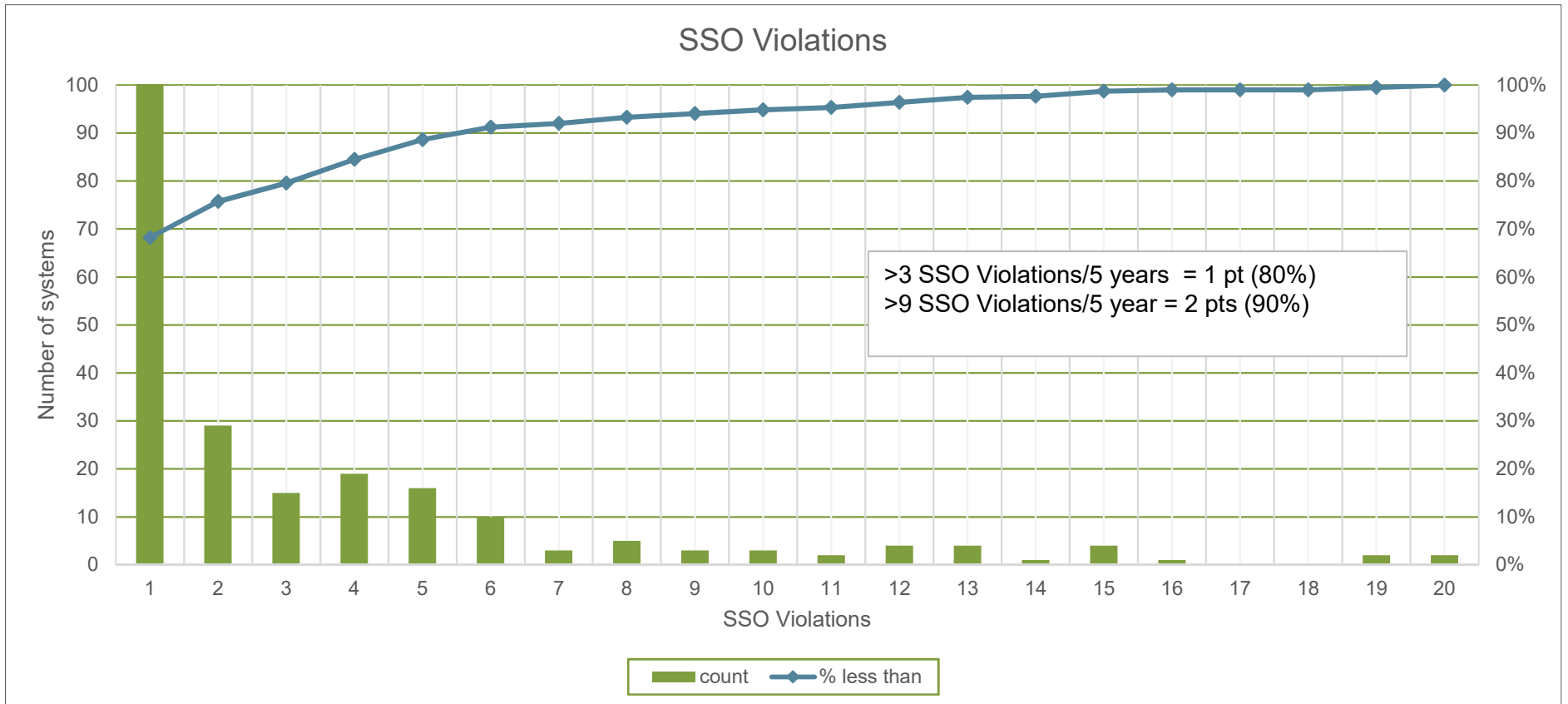
- Moratorium – action that restricts the ability of the system to add more users
  - 90% Rule - average annual flow > 90% permitted flow
  - 80% Rule - average annual flow > 90% permitted flow
  - Statutory – cannot adequately treat additional wastes
- Facilities with Statutory or 90% Rule moratorium were identified as at risk
  - Currently 38 systems identified



# Collection System Considerations

## Number of Sanitary Sewer Overflows over 5 year period

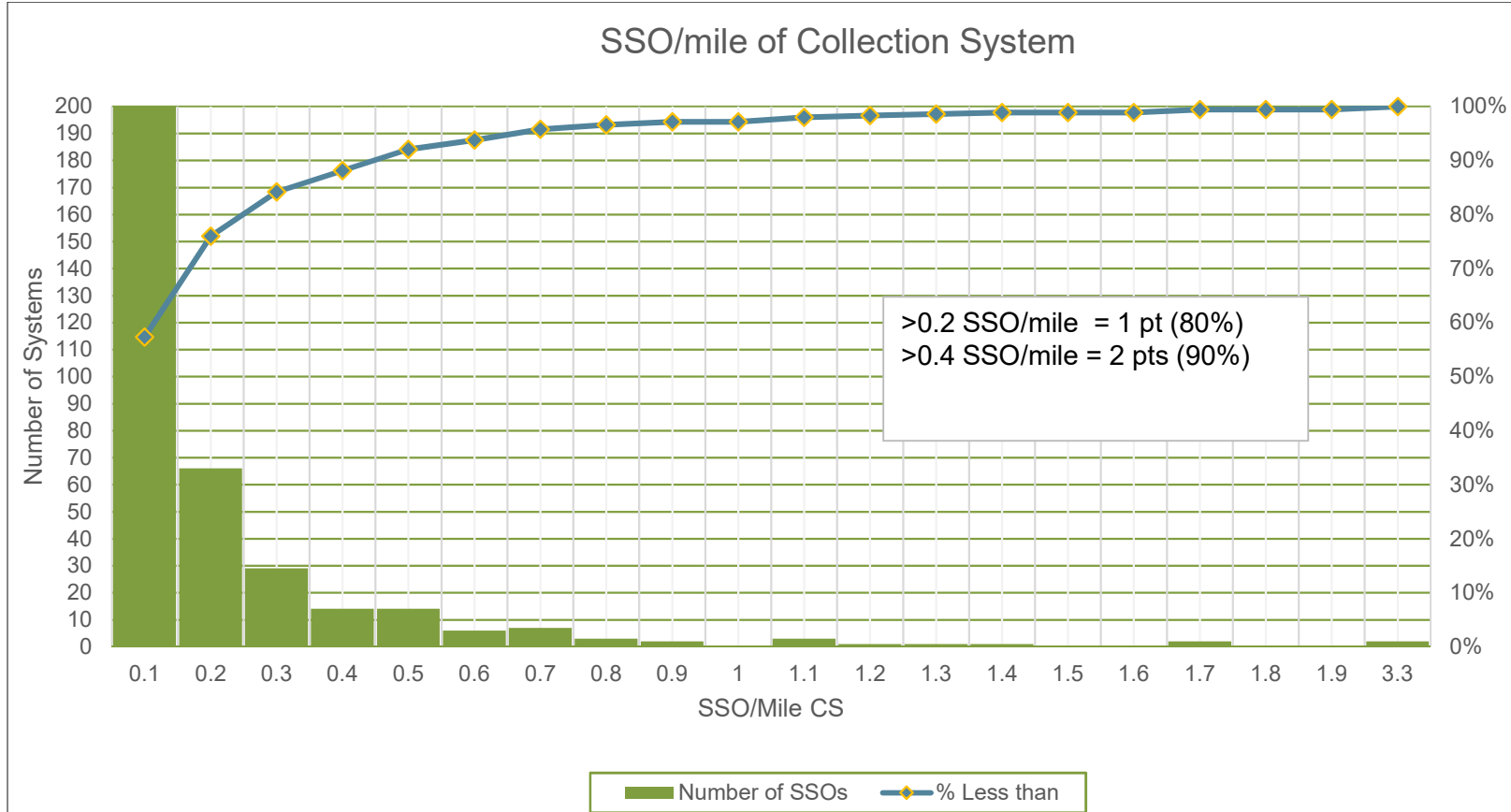
- Indicates aging infrastructure
- Indicates owner may not be supportive of systems needs



# Collection System Considerations

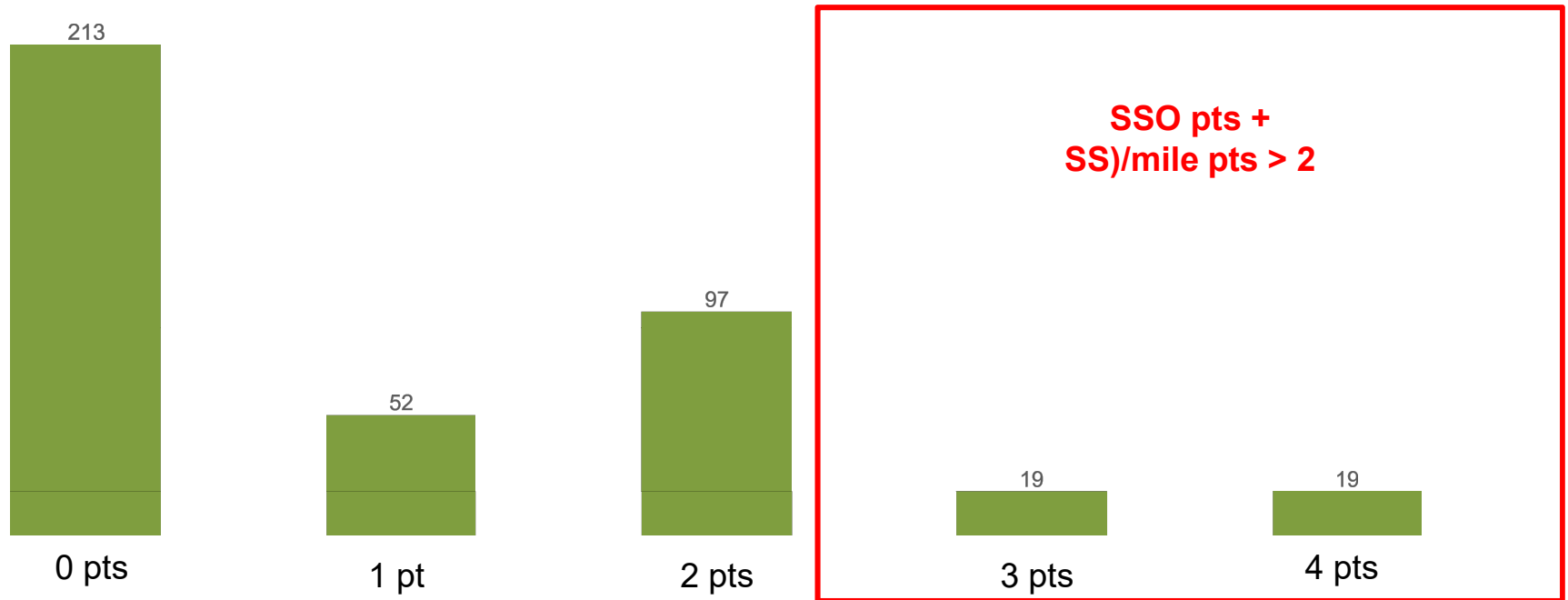
## SSOs/mile of collections system

- Large systems will have more SSOs
- SSO/mile likely better indicator of a system in disrepair or not being maintained



# Collection System Considerations

Total Collection System Points



# *Collection System Considerations*

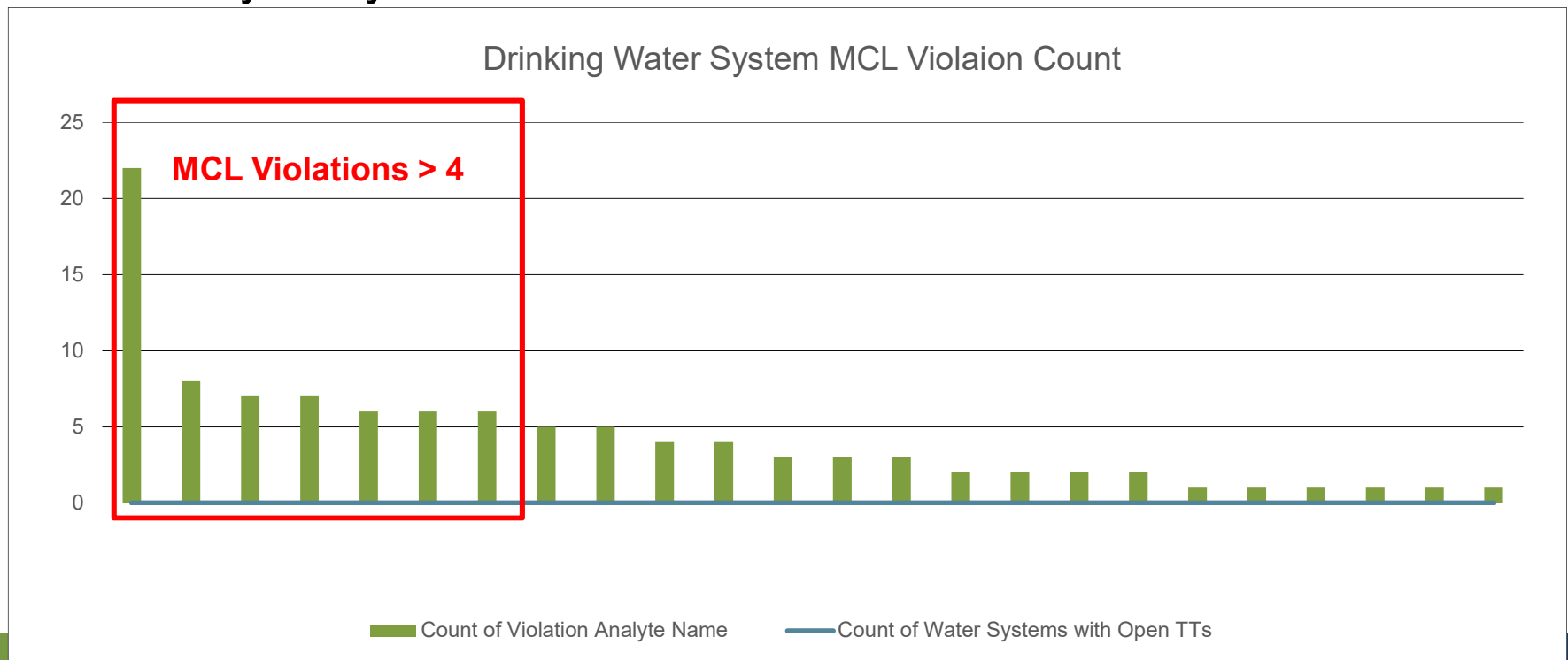
## Systems not reporting SSO's and not receiving inspections

- System <200,000 gpd are deemed permitted
  - No inspection requirement
  - Deemed permitted systems with a permit # have been inspected or have self reported SSO at some time in the past
- Likely candidates for not operating or maintaining their system
- Recommended that these systems be flagged for discussion with DWR Regional office staff to determine if they are at risk
  - Currently 9 systems identified



# Drinking Water Treatment Considerations

- Water systems with MCL violations that have open compliance schedules (i.e., not returned to compliance)
- Violations indicate inability of system to meet demand
- Violations indicate inability of owner to operate, maintain, or adapt
  - Currently 24 systems identified





# *Drinking Water Treatment Considerations*

## Water systems with open treatment technique violations

- Violations indicate inability of system to upgrade system to provide appropriate treatment
- Currently 0 system identified

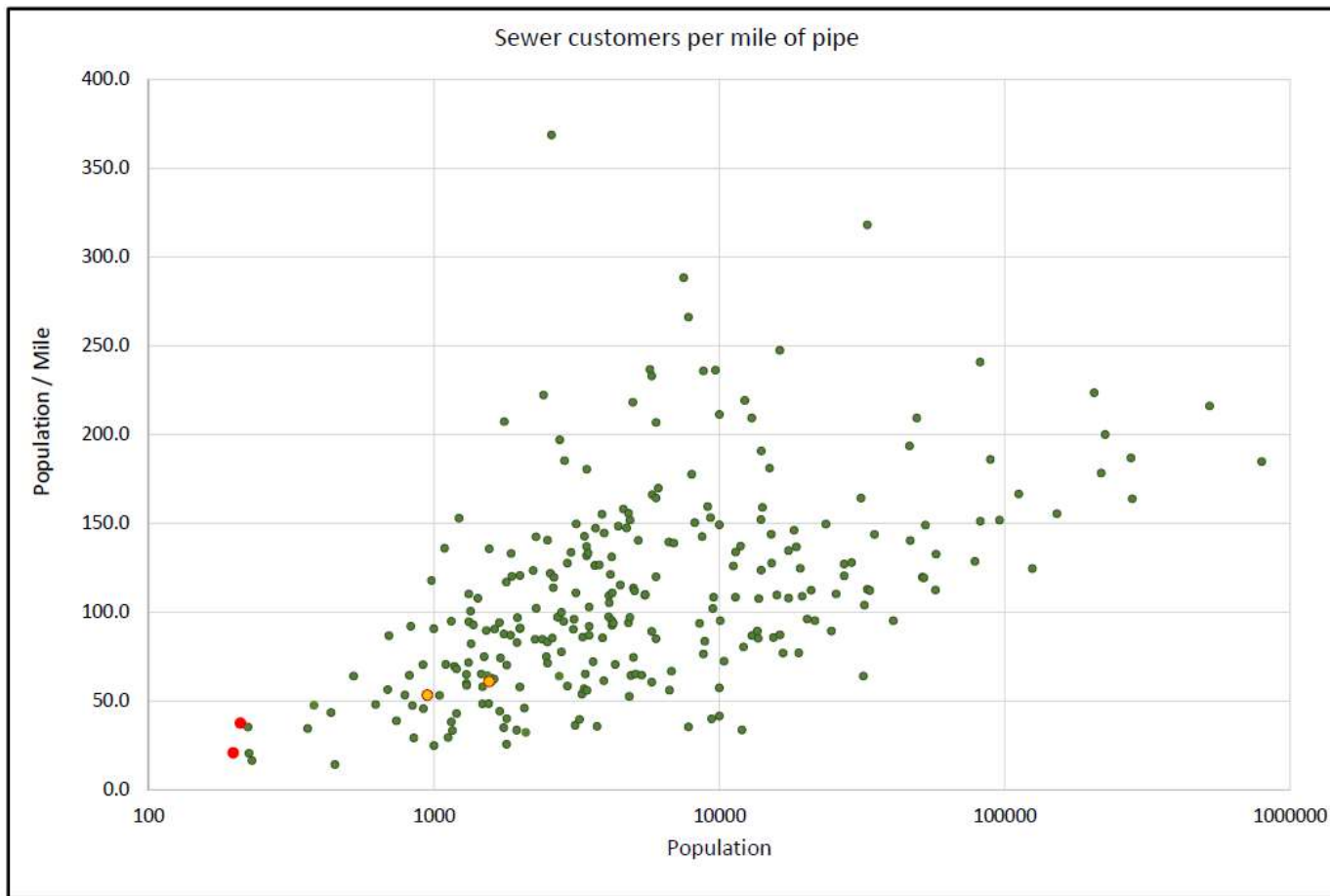


# *Infrastructure*

- Population per mile of collection or distribution line
- Threshold 100 people / mile pipe
- Does not consider treatment facilities
  - Considered depreciable assets / capita
  - Highly depreciated assets made difficult to use
- For collection systems, lack of data for smaller systems

# Infrastructure

- Collection systems – avg 107 (145 > 20k population)
- Distribution systems – avg 102 (240 > 20k population)



# Rates

- High rates
  - Combined for combined systems
  - Individual for single provider systems
- Wastewater generally higher than drinking water
  - Drinking water \$50 bill for 5,000 gal
  - Wastewater \$60 bill for 5,000 gal
  - Combined \$100 bill for 5,000 gal
  - Generally 80<sup>th</sup> – 90<sup>th</sup> percentile range



## *Financial – context*

- Grants shown for informational purposes – not used
- Transfers
  - Some may represent expenses for general government
  - Transfer in or out counted (bill language)
- Debt Service Coverage Ratio
  - Debt service disproportionate to revenue (bill language)
  - Ratio threshold – 1.1
- Surplus w/ debt (revenue covers expenditures and any debt service)
- Surplus w/ test debt (if no existing debt)



## *Financial – context*

- Percent depreciation
  - Threshold 50% ( $175 > 50\%$ )
  - May be used by LGC
- Operating margin
  - Revenue  $>$  expenses
  - Include depreciation
- Unit assistance list
  - Control issues
  - Financial issues
- Days cash on hand
  - Not used
  - Data for context





## **Agenda Item C**

### **Educational Component Update**







## **Agenda Item D**

### **Future Committee Meetings**



## *Future Committee Meetings*

- June 25 from 10:30 – 1:00 (scheduled)
- August (week of Aug. 10)
- September 16 (the day before Authority meeting)
- October (week of Oct. 26)





## Agenda Item E

### Concluding Remarks





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