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PHILADELPHIA WATER
EST. 1801

Final Recommendations of the National Drinking Water Advisory Council on the Lead and Copper Rule

advancing the science of water

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Caught in a Trap, Can't Get Out

- Years of debate continued over the control of lead in water and the reduction of risks
- Health community is focused on paint and soil, not water
- Some water systems still have problems
- Research continues to raise more questions
- Lead is complicated
- Many lead services lines still exist

Long Term Revision of the LCR

- **Stakeholder process was re-opened by EPA to get better consensus on the most difficult issues**
- **2014-15 NDWAC Working Group made recommendations to National Drinking Water Advisory Council in Fall 2015**
- **NDWAC then made its recommendations to the EPA Administrator**
- **EPA will take all of 2016 to formulate a proposed LTR-LCR**

The NDWAC Working Group

- **EPA identified key issues of the Lead & Copper Rule (LCR) that would benefit from input from stakeholders**
- **LCR Working Group (LCRWG) was formed under the auspice of National Drinking Water Advisory Council (NDWAC)**
- **15 working group members, with representation from:**
  - State regulators
  - Local health departments
  - Drinking water utilities (small/large systems; public/private)
  - Public interest groups (community, children's health, national NGOs)
  - NDWAC members

NDWAC WG Process

- **Technical presentations on state of the science:**
  - **Corrosion control**
  - **Sample site selection**
  - **Lead sampling protocol**
  - **Copper public education**
  - **Lead service line replacement**

- **Seven, two-day, in-person meetings**

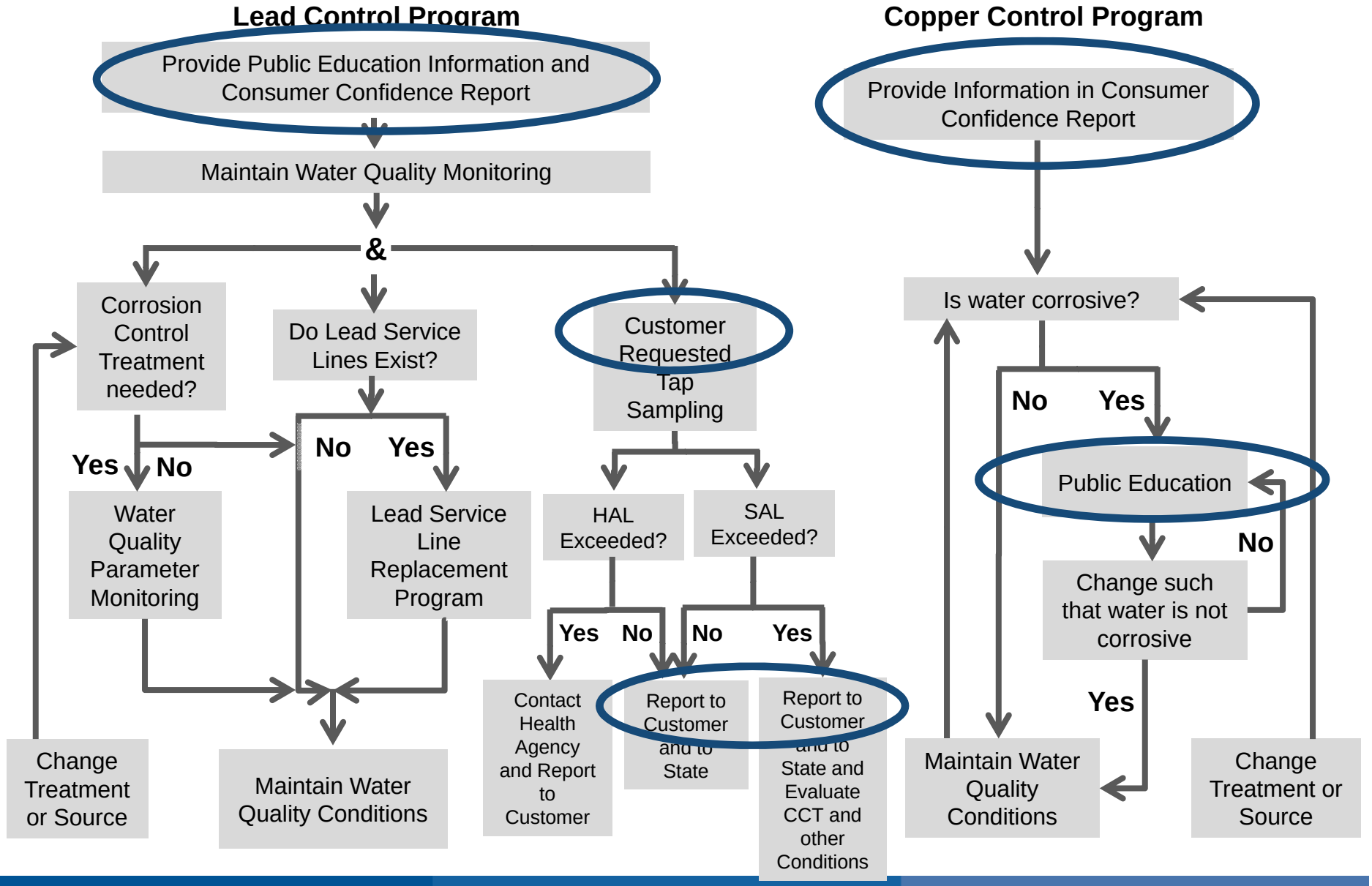
Issues Discussed by NDWAC Workgroup

- Sampling Procedures
- Sample Site Selection
- Corrosion Control Treatment
- Lead Service Line Replacement
- Lead Education
- Copper Corrosion
- State Enforcement

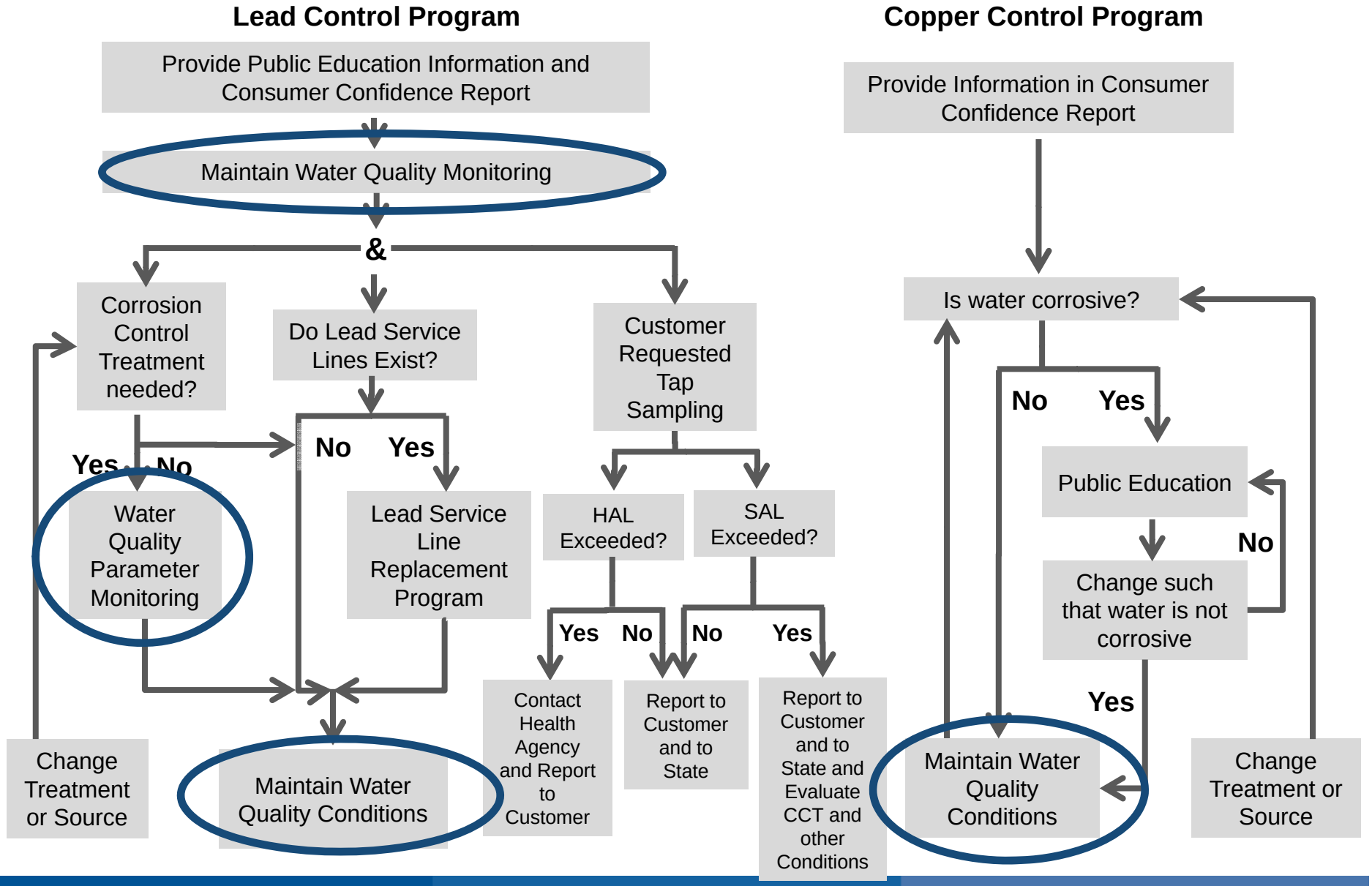
Considerations

- **The LCR should remain a treatment technique rule**
- **The issues associated with lead and copper are different**
- **CCT is complex, dynamic, and varies w/system conditions. Attention to unintended consequences is important.**
- **Attention to what systems can implement and States are able to oversee and enforce is important.**
- **PWS and state resources should be focused on actions that achieve the greatest health protection.**

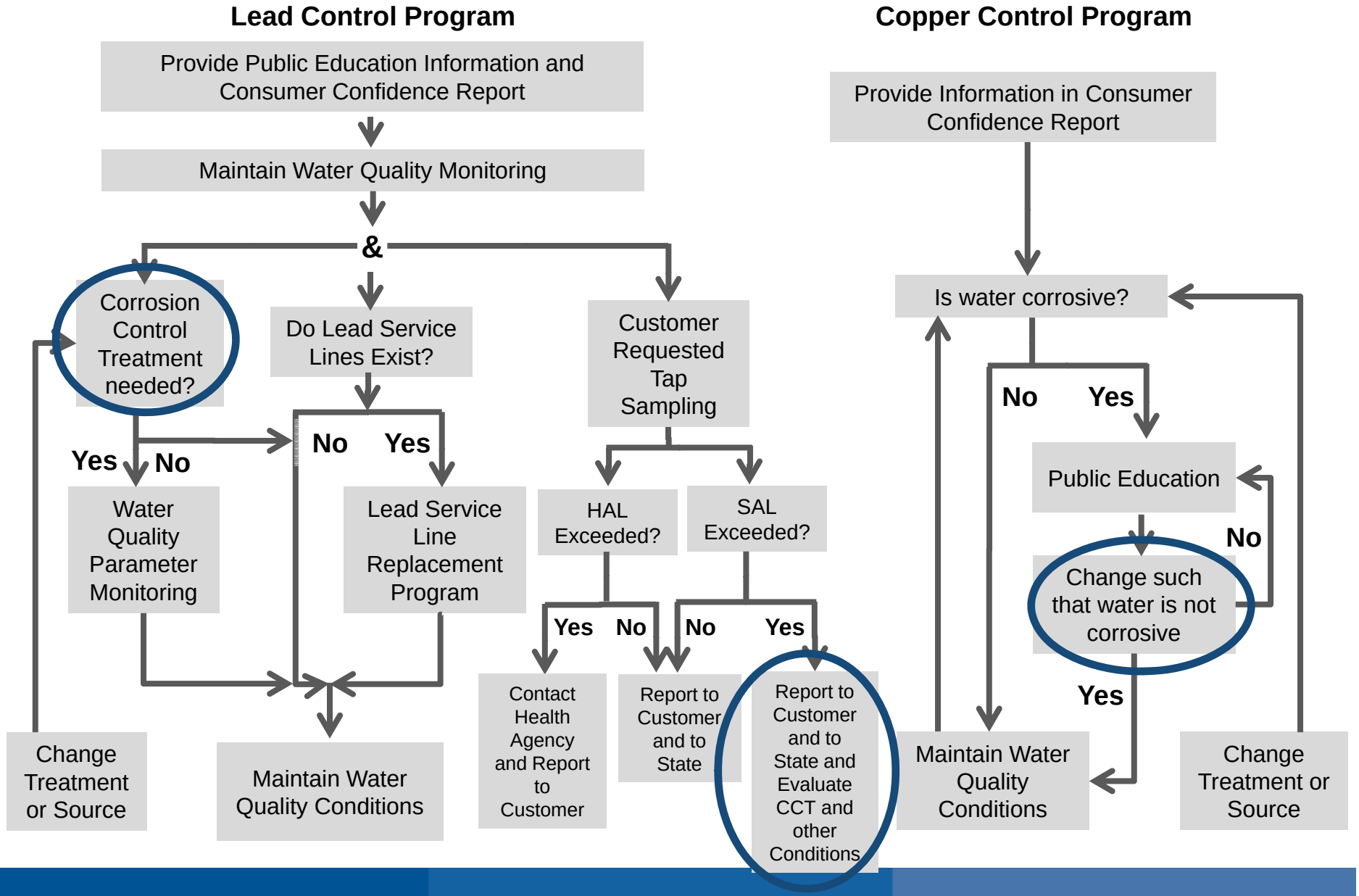
Public Education is a Cornerstone



Water Quality Monitoring is Expanded



Corrosion Control Treatment is Retained



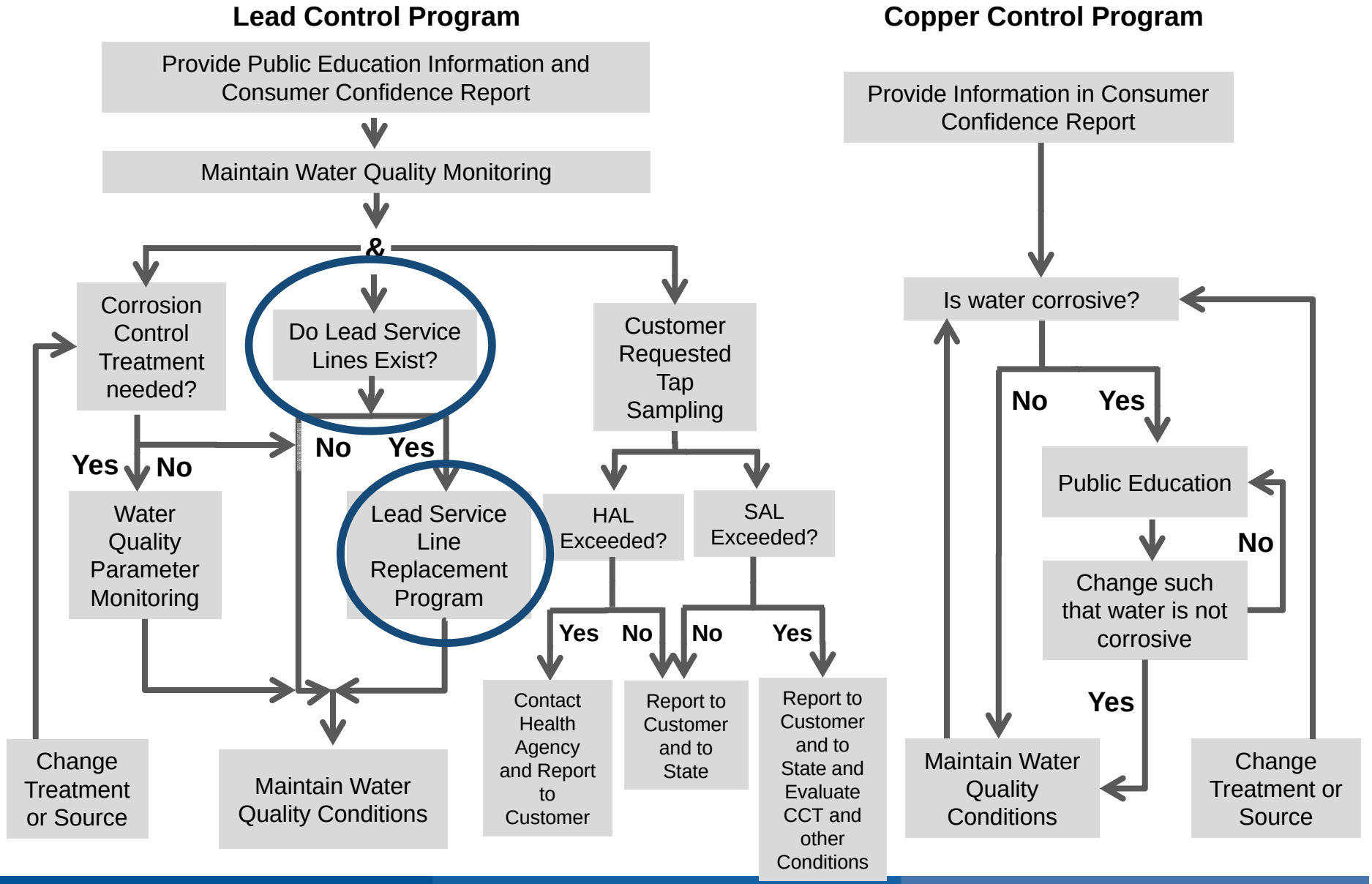
Corrosion Control Treatment

- **Can we determine when CCT is "optimized'?**
- **Does WQP monitoring reflect the whole distribution system?**
- **Are we monitoring all the right WQ parameters?**
- **Are States being strict enough on WQP limits?**

Results from LSLs are Difficult to Interpret

- **Dissolved Lead**
  - —We have theoretical and practical experience with corrosion control
- **Particulate Lead**
  - —Almost no theoretical or practical experience
- **We don't know if it is possible to manage particulate lead release using centralized corrosion control treatment**

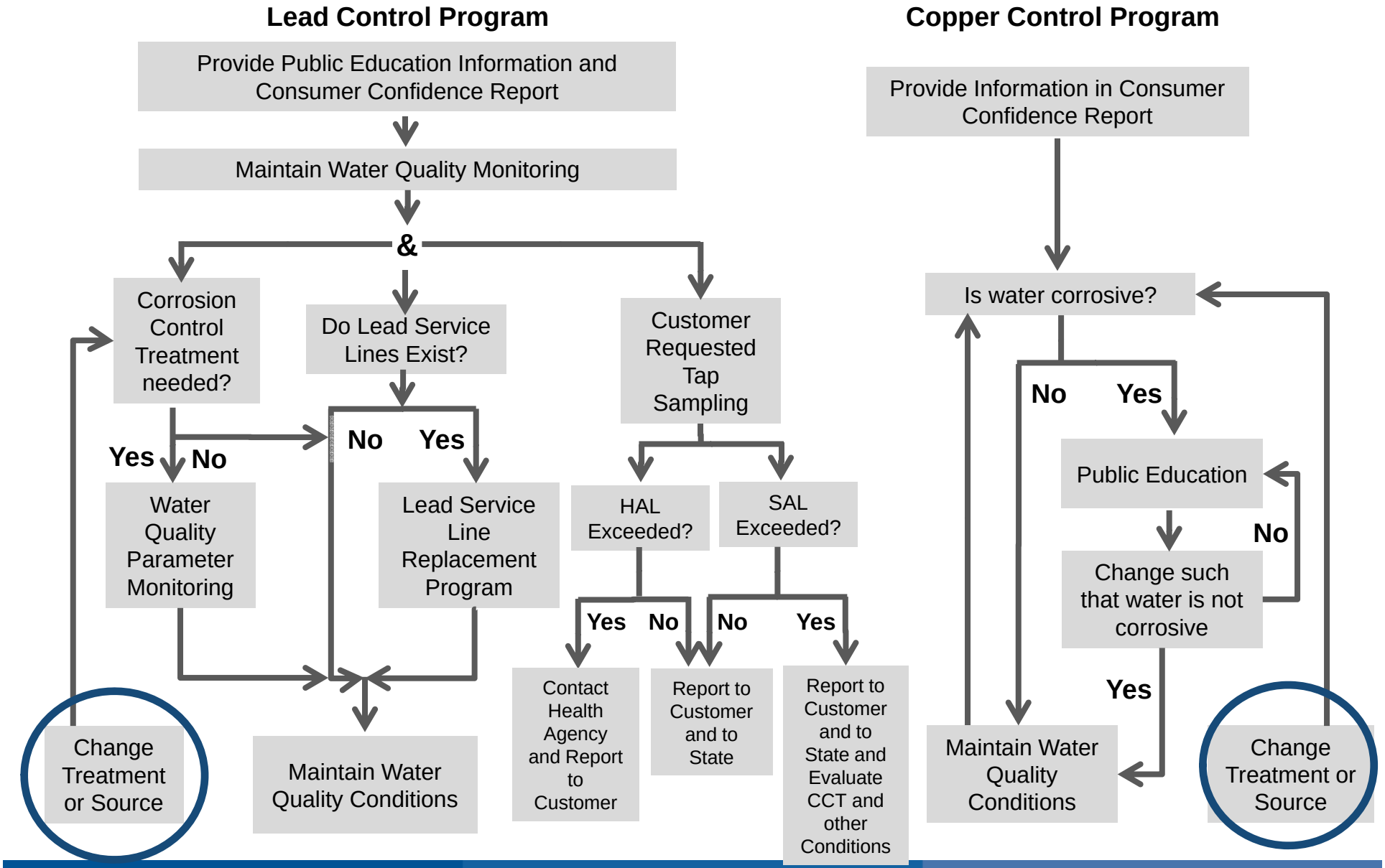
Find and Remove LSLs as Long-term Goal



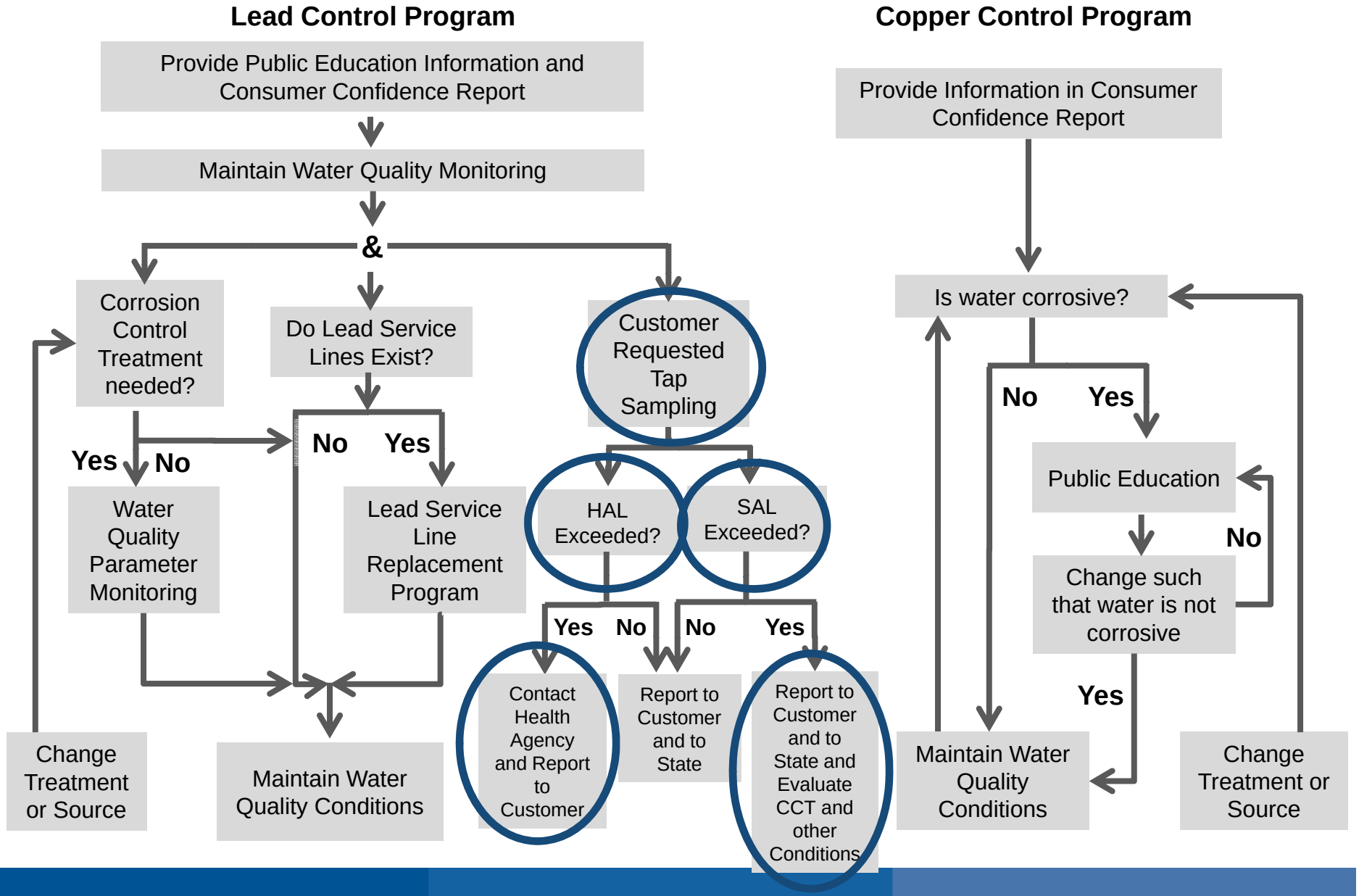
Where are the LSLs?

- Is there an inventory of service lines?
- How can lead service lines be located?
- Are there opportunities to engage real estate and home inspectors?
- How can the public gain access to where lead service lines exist in their communities?
- Who owns the LSLs?

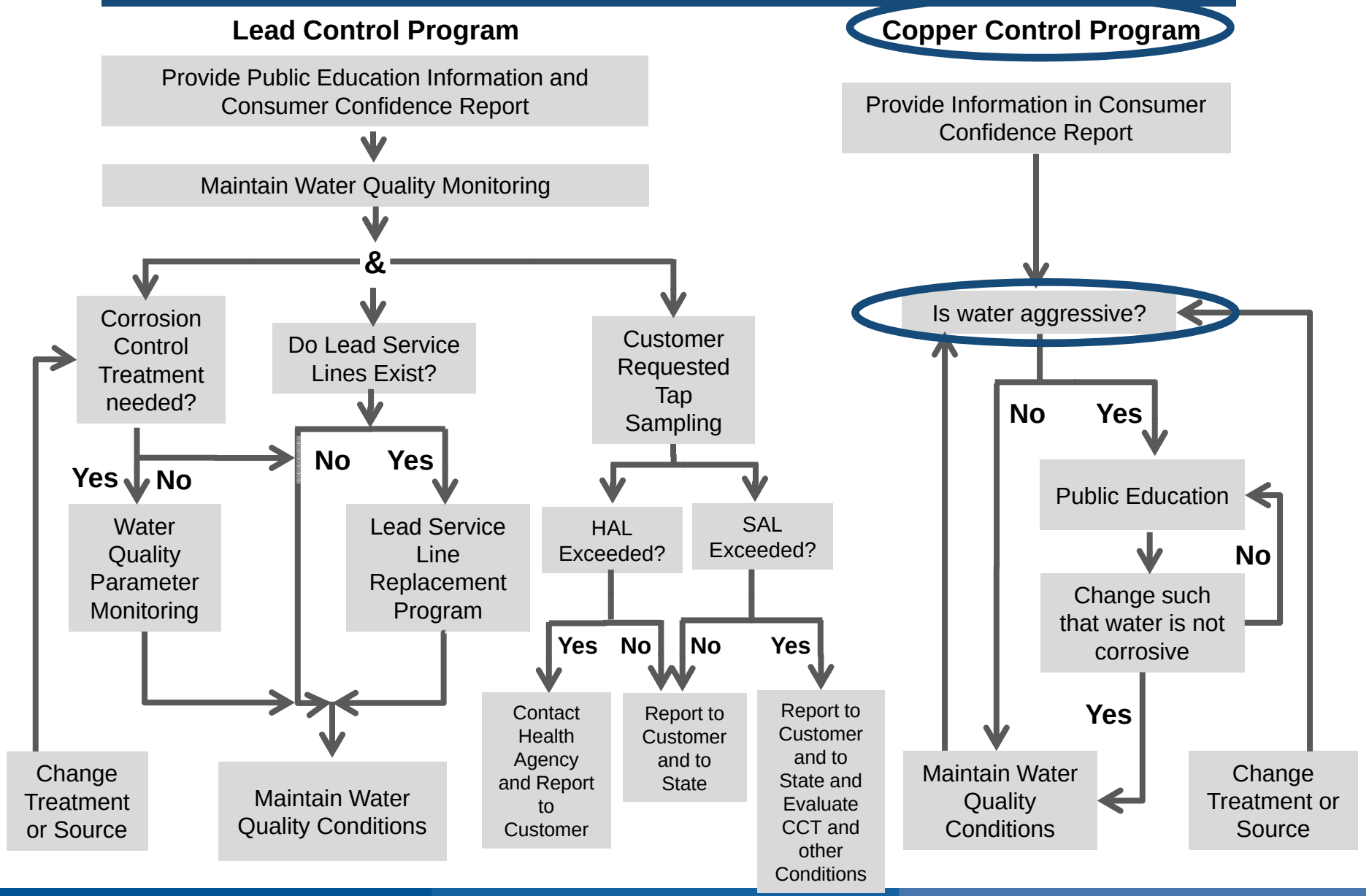
Re-evaluate when changes occur



Sampling: Continuous & Customer Initiated



Separate Copper Requirements



A Conceptual Approach to Copper…

- **Categorize systems by finished water aggressiveness (alkalinity, pH…)**
- **Monitor distribution system water quality**
- **Targeted outreach if water is aggressive**
- **Sample only if water is aggressive**
- **Apply corrosion control when needed**

THE CURRENT LCR WOULD KEEP US RUNNING IN A CIRCLE, FOREVER!

The revised LCR can set a long-term goal to get us to a place where such a Rule may no longer be needed !

Revisions to LCR are important but not sufficient

- **EPA must play a leadership role in a national effort with other partners to reduce lead in drinking water that includes, but is not limited to:**
  - Working across all offices and with other federal agencies on integrated approach to action and education *(HUD, CDC)*
  - State and local policies to support LSLR and to assist customers *(e.g. inspection/disclosure on sale of homes, building code requirements upon substantial renovation, priority in SRF funding)*
  - Enhanced cooperation among state and local health departments on childhood lead poisoning, screening and prevention that includes a focus on drinking water as a source

Perhaps more importantly….

The NDWAC's recommendations to revise the LCR address:

- **All the concerns about how and where to sample**
- **The greatest unresolved risk; LSLs**
- **The need for much better public outreach**
- **The difference between lead and copper**
- **The need to help customers take appropriate action**

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And the NDWAC recommendations already addressed the various concerns that were raised in the many recent news reports!