



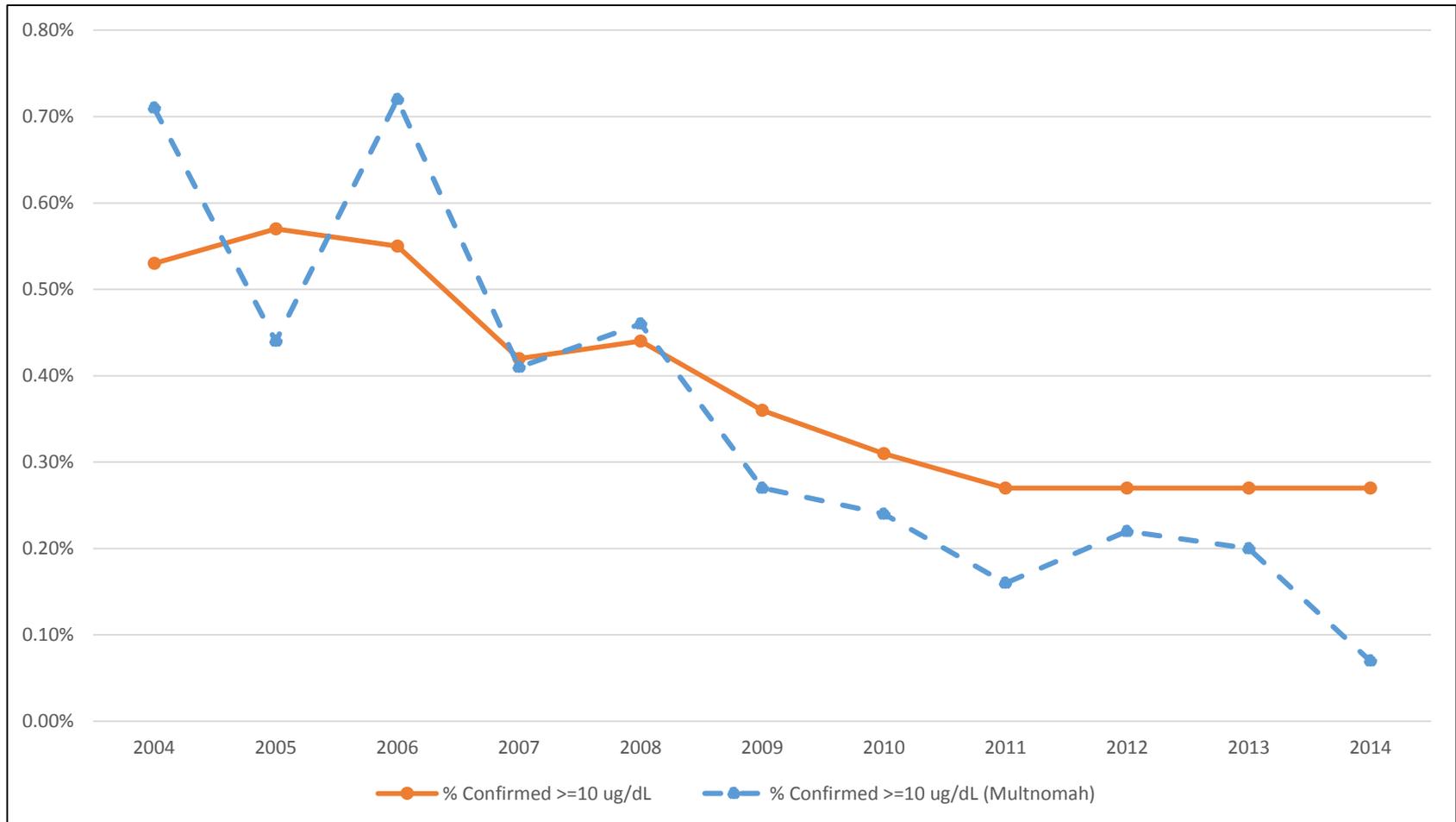
Program Update:

1. Lead
2. Program funding and priorities
3. Compliance and Enforcement

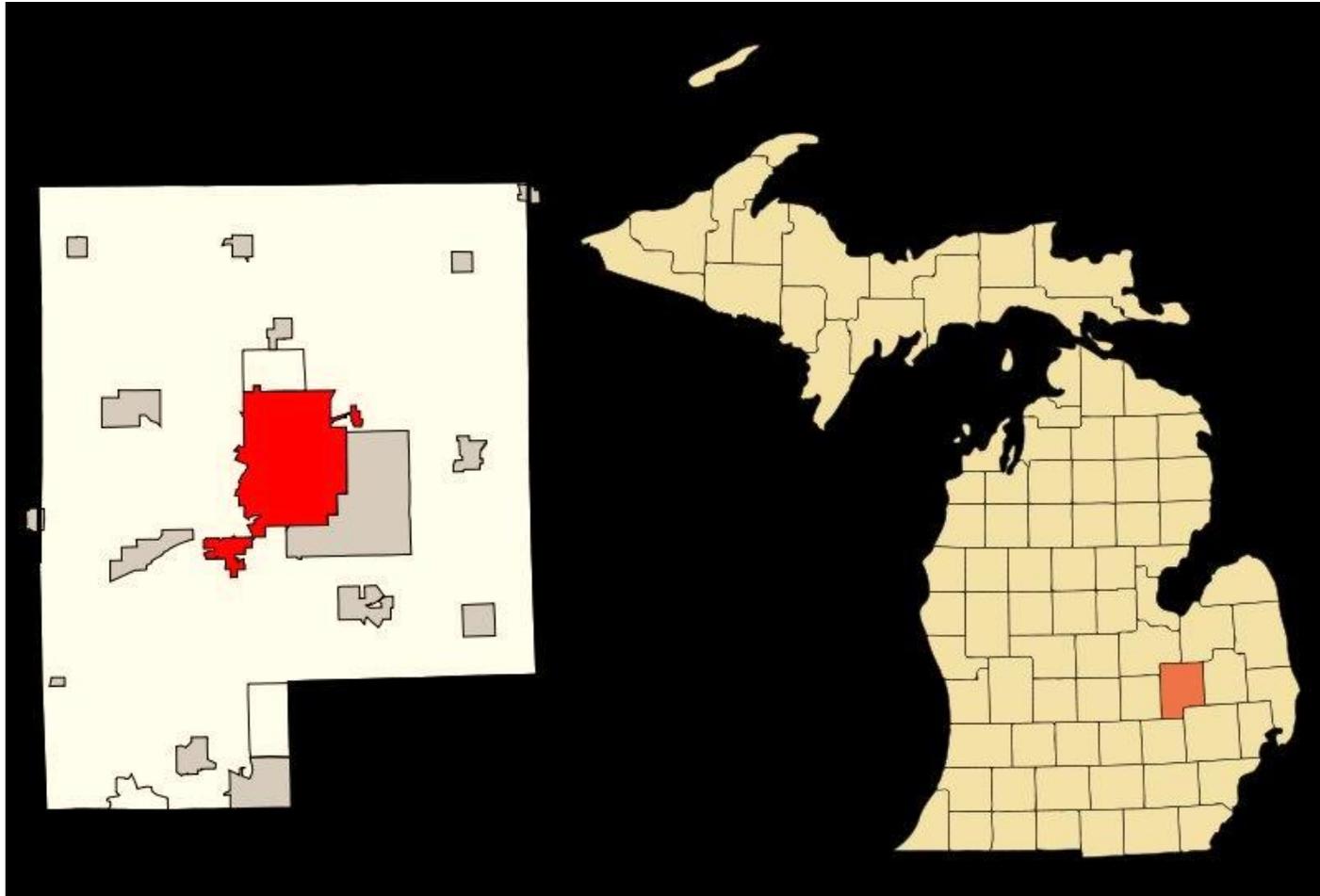
Drinking water lead regulations

- 1975 - EPA Maximum Contaminant Level for lead: 0.05 mg/L
- 1985 – Oregon
 - Lead solder prohibited in plumbing and water systems
 - Lead pipes in water systems prohibited, water suppliers submit schedules to identify and remove any lead pipes
- 1991 – EPA Lead and Copper Rule
 - Tap monitoring at specified sites and schedules
 - Action levels for lead (0.015 mg/ L) and copper (1.3 mg/L)
 - Specific actions if lead AL exceeded: public education, corrosion control studies and treatment, water quality parameters
- 2000 & 2007 - Short-term revisions to EPA LCR
- 2012 – CDC lowers recommended blood-lead level
- 2018/19 - Final Long Term Revised LCR

Percent of Oregon children tested with blood lead level ≥ 10 ug/dl (prior CDC concern level) 2004-2014



Flint, Michigan – fall 2015 to winter 2016



See August 2016 PIPELINE

Portland Public Schools – spring 2016



See August 2016 PIPELINE

National and state media

- 1/24/16 – “Could Flint’s Crisis Happen Here?” OR Statesman Journal
- 1/28/16 – “Lead in drinking water and Flint MI crisis” KGW-TV Live at 7
- 3/17/16 – “Beyond Flint: Excessive lead levels found in almost 2,000 water systems across all 50 states.” USA Today
- 3/17/16 – “Lead taints drinking water in hundreds of schools, day cares across USA.” USA Today
- 3/17/16 – “Drinking water providers flagged for contamination: 46 systems in 15 counties exceed regulatory limits for lead.” OR Statesman Journal
- 3/21/16 – “Lead found in drinking water in 10 Oregon schools.” OR Statesman Journal
- 4/9/16 – “Lead in the water: Why Portland’s on wrong end of national list” The Oregonian
- 6/1/16 – “Failing the Test-Portland Public Schools did not disclose extensive lead testing from 2010-2012” Willamette Week
- 6/4/16 – “ No tests, no reporting, no action: Few rules for lead in Oregon schools’ water” The Oregonian

Journal articles - Flint

- “Elevated Blood Lead Levels in Children Associated With the Flint Drinking Water Crisis: A Spatial Analysis of Risk and Public Health Response.” Mona Hanna-Attisha MD, et.al. American Journal of Public Health (Dec 2015).
- “National Survey of Lead Service Line Occurrence.” David Cornwell et.al, Journal American Water Works Association (April 2016).
- “Blood Lead Levels Among Children Aged <6 Years-Flint, Michigan, 2013-2016.” Kennedy et. al, Mortality and Morbidity Weekly Report, CDCP (July 1, 2016)
- “Why Flint Matters.” Eric Rothstein, Journal American Water Works Association (July 2016).
- “The Flint Crisis.” Roundtable discussion, Journal American Water Works Association (July 2016).

Actions in Oregon

- Governor's Office directive to OHA and OR Dept. of Education to review existing programs and provide assessment of lead in Oregon schools served by public water suppliers – 4/4/16
- OHA Director response to EPA HQ letter – 4/5/16
- OHA DWS response to EPA HQ on approach to LCR implementation, and follow-up with EPA Region X on recent Oregon lead action level exceedances – 4/18/16
- Meeting with Portland Water Bureau/EPA Region X/DWS on further optimizing corrosion control treatment – 4/21,8/22/16
- Transparency - All above documents on DWS website, new data on-line posting of required follow-up action timelines and status after lead action level exceedance – 6/1/16
- OHA/ODE statewide plan on lead in school and child care drinking water – 6/8/16

EPA HQ “asks” to states on LCR oversight “framework” (Feb. 2016):

- Source/treatment changes
- Sampling plans
- Invalidation of samples
- Monitoring waivers for small systems
- Public education and outreach
- Others
- Systems with action level exceedances in past 5 years (Oregon had 50; 1/3 Portland and wholesale customers, 1/3 done, 1/3 in progress)

EPA HQ “asks” to state primacy agency directors (2/29/16):

- Confirm that the state’s protocols and procedures for implementing the LCR are fully consistent with the LCR and applicable EPA guidance.
- Use relevant EPA guidance on LCR sampling protocols and procedures for optimizing corrosion control.
- Post on state website all state LCR sampling protocols and guidance for the identification of Tier 1 sites

EPA HQ “asks” to state primacy agency directors (2/29/16):

- Work with public water systems – with a priority emphasis on large systems – to increase transparency in implementing of the LCR by posting on their and/or on state agency’s website:
 - the materials inventory that systems were required to conduct under the LCR, including locations of lead service lines, together with any more updated inventory or map of LSLs and lead plumbing in the system
 - LCR compliance sampling results collected by the system, as well as justifications for invalidation of LCR samples
- Enhance efforts to ensure that residents promptly receive lead sampling results from their home, together with clear information on health risks and how to abate them, and that the general public receives prompt information on high lead levels in their drinking water system.

EPA Region X “asks” to OHA (4/14/16):

- Request the Portland Water Bureau test high priority schools and daycares that receive water from PWB to ensure they are below the action level exceedance.
- Work with PWB as it re-evaluates its corrosion control treatment method to minimize lead levels at user’s taps and achieve OCCT as expeditiously as possible.

Why Oregon should not be Flint

- Urban development is much more recent, less use of lead service line materials (where used, primarily short “pigtailed”)
- Early prohibition of lead materials, removal of lead pipes (1985)
- Good initial implementation of LCR, since corrosivity of Oregon water was well recognized as a potential problem
- 1,200 community and nontransient noncommunity systems have to monitor for lead at the tap, EPA sampling protocols were and are used
- Water suppliers installed appropriate corrosion control treatment and integrated it into everyday operations
- We are assuring that we are fully engaged with each water supplier exceeding the lead action level in recent years

PWSs take stock of their LCR compliance!

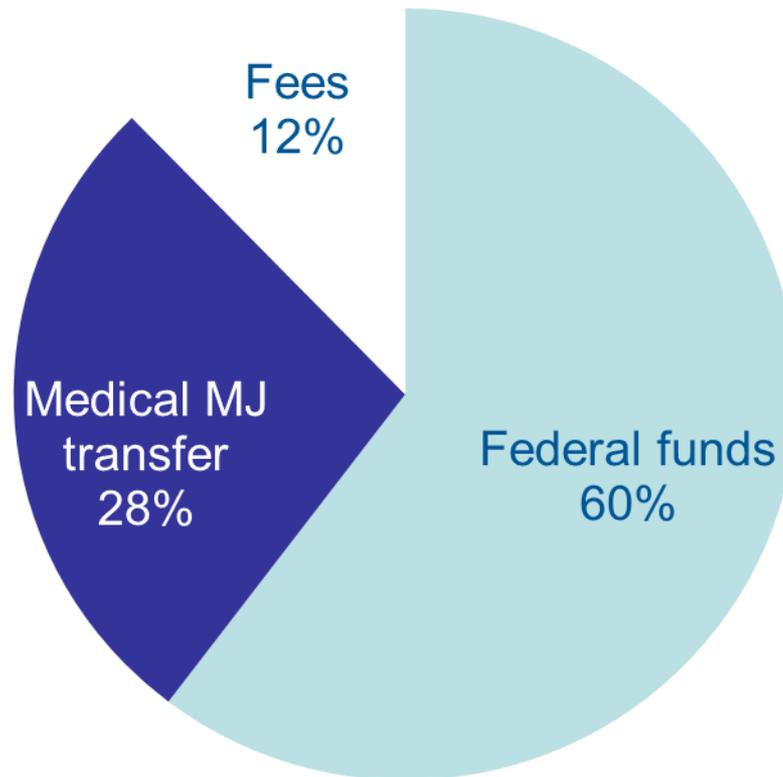
- Revisit materials evaluation, update if needed, post on utility website. Revisit status of lead pigtail removal, assure completion
- Revisit sample site selection, be sure to include homes with lead pigtails if any remain
- Revisit sampling instructions for homeowners – no prestagnation flushing, no aerator removal or cleaning. Use wide-mouth bottles
- Sample invalidation is limited (lab error, bottle damage/tampering, did not meet site selection criteria)
- Revisit corrosion control treatment, look for opportunities to optimize effectiveness
- **Assure all required follow-up actions taken timely following lead action level exceedence, assure public education is timely and complete, be transparent in all work**

Lead in school and child care water

- Sampling this summer
 - Use EPA “3Ts for Reducing Lead in School Drinking” to guide sampling and mitigation
 - Use OHA accredited labs for testing
- 80+ phone consultations by DWS staff so far
- 200+ print media articles, June through August
- Speaking points developed for local health departments, webinar
- Incident Management Team formed 7/15/16
- OHA staff participated in school district association meetings, statewide webinar
- Portland Public Schools collected 13,000 samples (PWB ran 2,000 of these in their lab)
- Likely number of statewide school samples? 50,000?
- ODE promulgated Health and Safe Schools Plan rules (lead in water, lead paint, radon, pest management, indoor air, etc.)
- OHA to have a public website to show test results by late fall
- Stay tuned

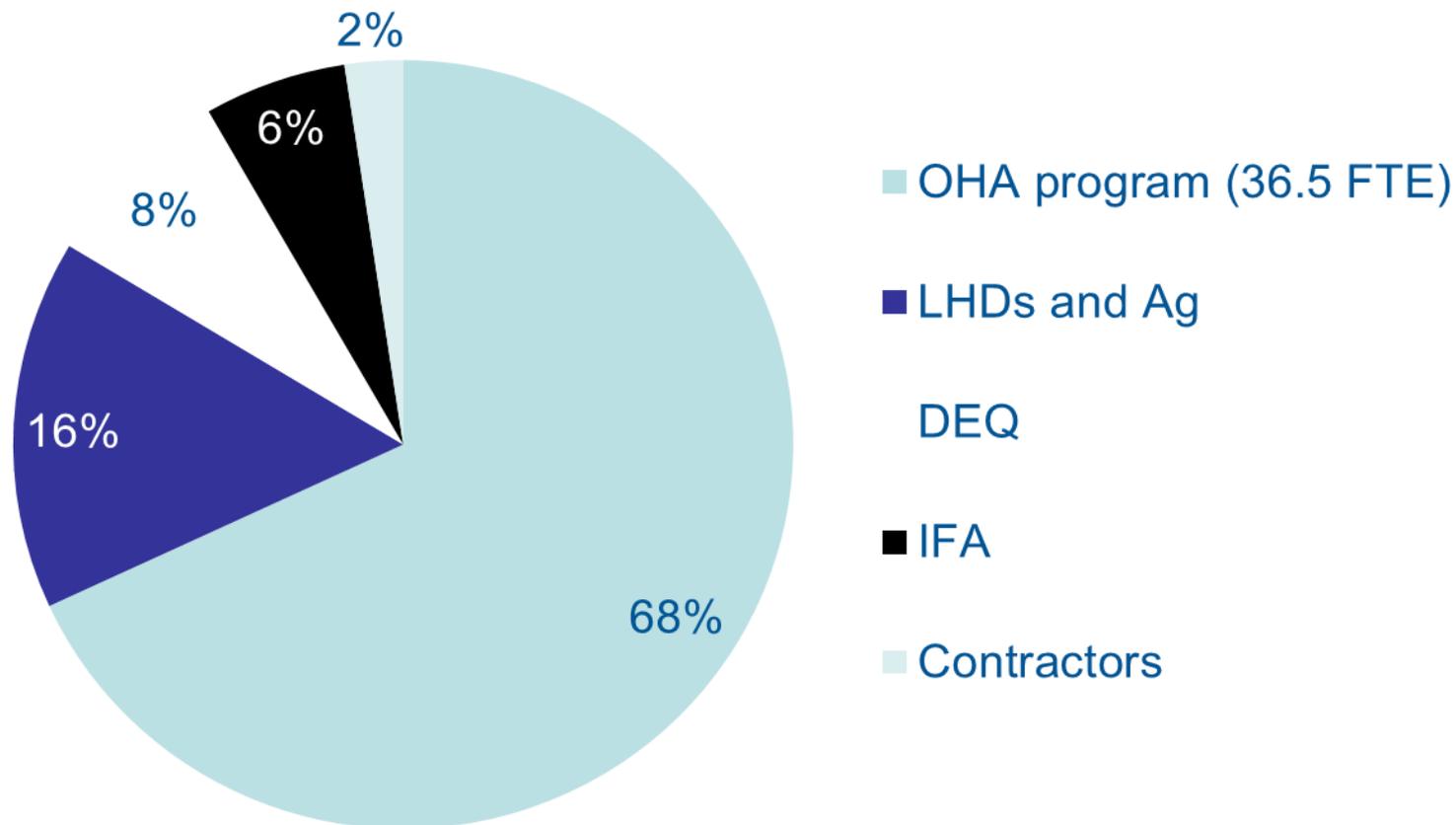
Drinking Water Services revenue

2015-17 Revenue - \$17.9 M



Drinking Water Services expenditures

2015-17 Expenditures - \$18.6M



Balancing revenue/expenditures, 3-part solution

- Raised fees in 2015 to cover full cost of fee-based services through 2019
- Using last remaining federal funds balance from prior grant years by 9/30/16. (SRF FFY 14 set-asides – source water assessment updates)
- **No state staff vacancies filled until revenues = expenditures! Increased federal revenue unlikely in near term.**

DWS is getting smaller to be sustainable (33 staff in 2003, 50 in 2008, 35 now. Contraction to continue)

Program focus going forward is on essential functions that accomplish the most public health benefit

Essential function priorities/ranking

- 1. Investigate reports of waterborne disease and reports from labs of contamination of public water systems, assure follow-up and public notice**
- 2. Conduct on-site inspections of water systems, identify deficiencies, assure correction**
3. Adopt and implement safe drinking water standards and regulations
- 4. Maintain statewide emergency response and respond to drinking water emergencies**
5. Review and approve water system construction plans

Essential function priorities/ranking

6. Receive and enter WQ tests, assure data quality, determine compliance, report to EPA
7. Certify water system operators
- 8. Investigate priority noncomplier water systems and certified individuals and work to bring into compliance**
9. Conduct enforcement when necessary
- 10. Identify water systems and maintain inventory and information**
- 11. Consult with and educate water suppliers on regulations, treatment options, operation practices**

Essential function priorities/ranking

11. Train water system operators
12. Conduct outreach to water suppliers and public through newsletters and website, coordinate with stakeholders and other agencies
13. Provide financial assistance to water suppliers for safe drinking water construction projects
14. Certify backflow testers and specialists, assure communities report on local backflow programs
15. Analyze compliance data to identify workload and compliance trends for program management and improvement

Essential function priorities/ranking

16. Maintain, manage, and upgrade safe drinking water database
17. Provide technical assistance to smaller water suppliers with operational problems
18. Accredit drinking water laboratories
19. Update source water assessments
20. Regulate non-EPA water systems
21. Assure water systems have technical, financial, and managerial capacity to provide safe drinking water
22. Conduct oversight of domestic well testing

Compliance and enforcement – roles and responsibilities

- Compliance:

- Role - advise, assist, persuade, and track the water supplier to take actions needed within required time frames
- Responsibility – regulated agency technical staff: DWS field services, contract county staff, or ag staff respectively

- Enforcement:

- Role – issue and track formal legal actions when infrastructure improvements are needed that could take considerable time and effort, when the only solution is to cease operation or transfer ownership, or robust compliance efforts ultimately fail to produce results
- Responsibility – DWS Data Management, Compliance and Enforcement unit

Successful compliance work is essential, given that enforcement powers available to OHA are limited. Enforcement action should only be necessary in a few exceptional cases.



Questions?

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