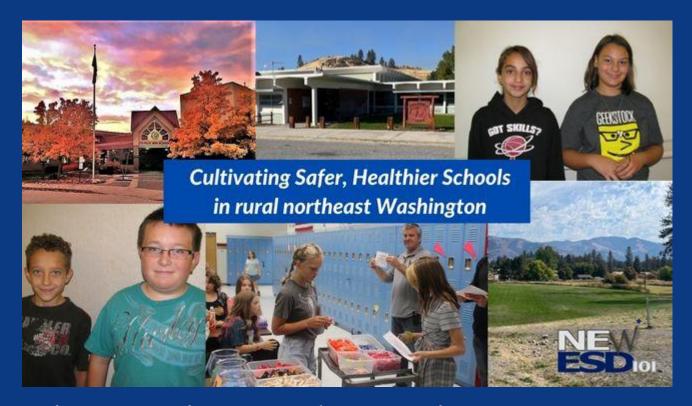
#### NEWESD 101 – Phase 2 Presentation



NorthEast Washington Educational Service District 101

Jerry Page

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### Team Description

- LEA: Northeast Washington Educational Service District (NEWESD) 101
  - Team Conservation Panorama
  - Location: Spokane, Washington 99223-7738
  - NCES ID: 5300010
- NEWESD 101 promotes educational excellence by delivering essential, cooperative service to schools and other learning communities.
  - Our Team is dedicated to advocacy, equity with antiracism, fiscal management, innovation, partnership, service, sustainability, and visibility for our schools.
  - o Regionally serving 100,000+ students in 59 public districts, 45 private and 4 charter schools across 7 counties.
- Participation in the Energy CLASS seminars, trainings, and cohorts promoted energy saving concepts to be used in our Energy Champion schools and nearby districts.
- Energy Champions:
  - Leroy Hicks, Inchelium School District Maintenance Supervisor
  - Chris Jensen, Columbia School District Maintenance Supervisor
  - Brandon Judd, Colville School District Maintenance Director
  - Mark Nelson, East Valley School District Executive Director of Maintenance



#### Progress Made During Phase 2 and Associated Impacts

- Conducted Phase 1 or 2 energy audits at 3 schools from initial application, via 3<sup>rd</sup> party contractors
  - State requirements for energy efficiency, etc.
- Resulting projects:
  - Columbia SD (rural, adjacent to on tribal lands)
    - Window modernization
  - Colville SD
    - Purchased field line painting robot saved fuel and man-hours
  - East Valley SD (urban)
    - New air handler unit and RCx VAVs
  - Inchelium SD (tribal)
    - Upgraded lighting to LED
- Knowledge gained in Phase 2 that was shared with LEA leadership or other stakeholders to help building upgrades succeed in the future
  - Benchmarking next steps what to do with the data



## Summary of Facilities Addressed in Our Plan

- Columbia SD located in Hunters, WA educating 177 students in a rural and tribal community with 76% of students qualifying for free and reduced lunch.
  - Any Phase II award will be direct to the *Columbia Elementary and High School* for continued energy efficiencies.
- Colville SD situates within its' namesake, Colville, WA. Five schools house 1845 students in this semi-rural hub of northeast Washington.
  - The *Colville Junior High School* will receive funds to enhance its operations as a community shelter building.
- East Valley SD resides in a primary industrial sector of Greater Spokane, WA. Eight schools incorporate rural and urban instruction to 4,277 students.
  - It serves a diverse ethnic student population with a high percentage of free and reduced lunch eligibility. *Trent Elementary*, as the area community shelter, will benefit from Energy CLASS for building modernization.
- Inchelium SD is a rural community positioned on the Colville Tribal Reservation. This campus consists of two buildings serving 223 students.
  - Over 97% of students served are Native American with 77% of students receiving free or reduced lunch. Future Energy CLASS Prize funds will be directed to the *Inchelium Middle School*, as the area community shelter during severe weather and wildfires



# Summary of Proposed Building Upgrades

- Columbia SD (rural, state school)
  - HVAC modernization including kerosene-fired boiler to 90% efficient condensing boiler
- Colville SD
  - Seeking to modernize HVAC system from mid-1960s system to 90% efficient with increased filtration capabilities
- East Valley SD
  - Abandon existing convection registers to a forced air HVAC incorporating high efficiency boilers and a heat recovery chiller loop system
- Inchelium SD (rural state school on tribal lands)
  - HVAC modernization for 2025



### Summary of Impacts

- Identify cost savings and health or learning impacts anticipated if upgrades are implemented
  - Columbia SD went from \$30k/mo to \$8k/mo for fuel oil through window retrofit and via decommissioning very old boiler and injector replacement
    - Able to switch over to using secondary boiler
  - Colville SD saved 2 FTE on man-hour and roughly \$1500/mo (spring-summer months) in fuel for field striping
- Lessons learned
  - Even with funding and training support, some schools/districts cannot do this without an added staff member!
  - Get the Business Officers in the room for the financial and business case trainings and materials



# Summary of Next Steps for Implementation

 NEWESD 101 will provide the Phase 2 Prize funds to the previously mentioned school districts for use in their HVAC modernization projects

