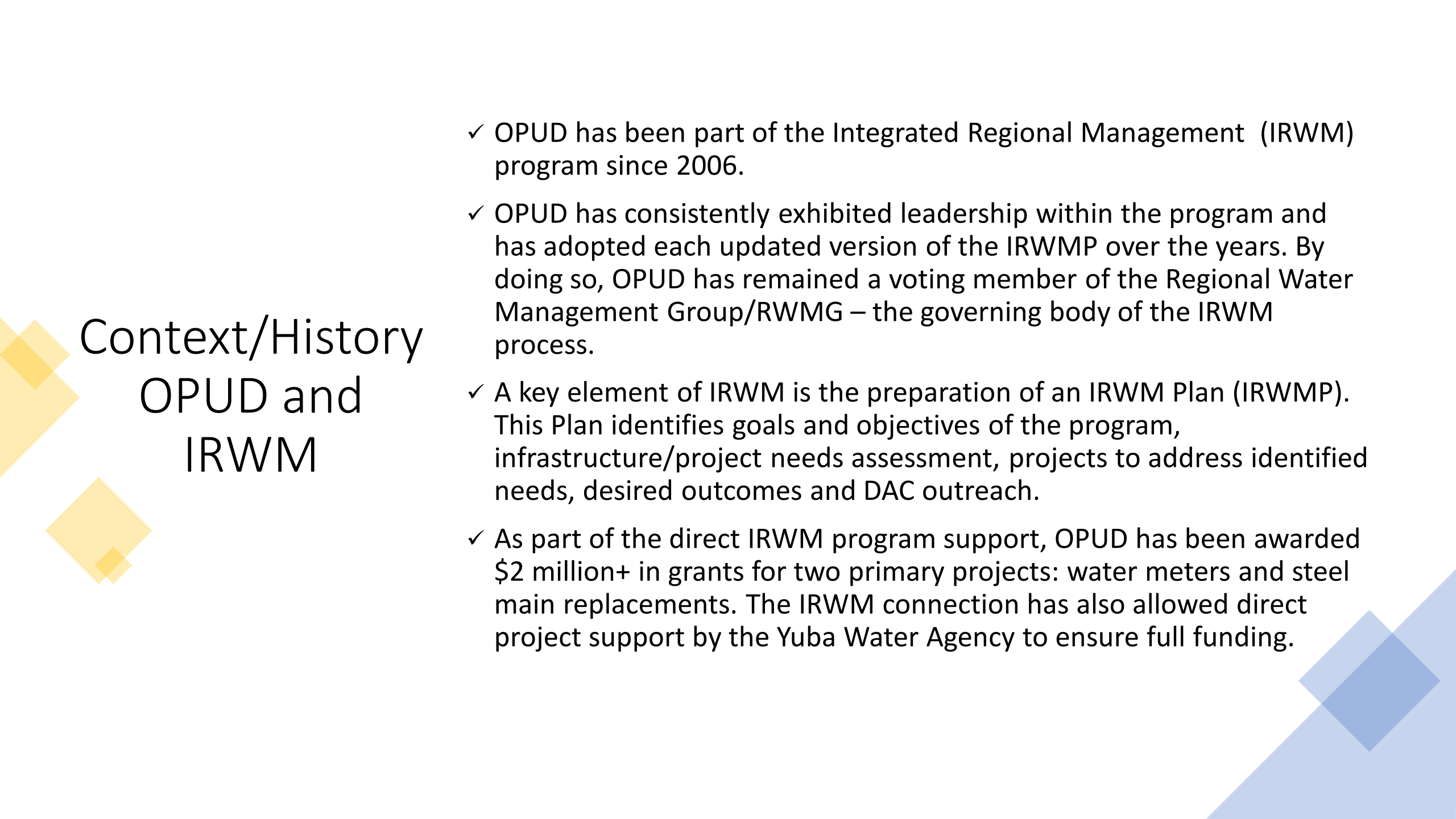




OLIVEHURST EDUCATION PROGRAM

April 2018 – December 2021



Context/History OPUD and IRWM

- ✓ OPUD has been part of the Integrated Regional Management (IRWM) program since 2006.
- ✓ OPUD has consistently exhibited leadership within the program and has adopted each updated version of the IRWMP over the years. By doing so, OPUD has remained a voting member of the Regional Water Management Group/RWVG – the governing body of the IRWM process.
- ✓ A key element of IRWM is the preparation of an IRWM Plan (IRWMP). This Plan identifies goals and objectives of the program, infrastructure/project needs assessment, projects to address identified needs, desired outcomes and DAC outreach.
- ✓ As part of the direct IRWM program support, OPUD has been awarded \$2 million+ in grants for two primary projects: water meters and steel main replacements. The IRWM connection has also allowed direct project support by the Yuba Water Agency to ensure full funding.

Context/History - OPUD as DAC

- ✓ What is DAC? Disadvantaged Community. 80% of MHI for the state – Olivehurst qualifies, Plumas Lake does not.
- ✓ Why is DAC status important? The DAC status of a community directly influences eligibility for grants, support services and ‘no pay back’ loans.
- ✓ DAC has been a Yuba IRWM focus since 2012 when the team began direct community engagement with local outreach and interviews. This was done as part of the IRWMP Update, to respond to the guidelines, as well as the RWMG-articulated priority focus of the Plan, as advocated by OPUD staff at the time.
- ✓ The outreach indicated that the two top local issues with respect to water were: (1) whether the water is safe to drink and (2) why is the river so polluted. Once people were helped to understand that the drinking water didn’t come from the river some concerns were reduced. However, uncertainty remained for many residents and customers.
- ✓ A California state Grant/DAC supported the initial Olivehurst Education effort – began in 2018 – approved by Sacramento River Funding Area/SRFA committee and advocated through OPUD senior staff. This was the start of the Olivehurst Education Program. The initial focus was “is your water safe to drink?”

OPUD Education Program Components

- ✓ The first year (2018-2019) of the DWR-funded program began with outreach to local principals followed by connections to their teachers – Ella and Arboga Elementary Schools – 4th Grades were the first partners.
- ✓ The first year focused on outreach, data collection and program design in direct collaboration with the principals and teachers – with initial delivery in Fall 2019. The program morphed from a “is your water safe to drink” PR effort into a curriculum-based/teacher supported classroom experience, at the request of local teachers and principals.
- ✓ Year 1 was pre-Covid. The following graphic will illustrate the program as originally conceived.
- ✓ YWA picked up the program in July of 2019/20 with implementation of the originally designed program morpging in the context of Covid-related school closures.
- ✓ No available formal STEM curriculum at that time in the OPUD schools.
- ✓ Newest curriculum only purchased in 2021– teachers weren’t directly trained in it and many actually didn’t know what NGSS was.
- ✓ Initial process (shown on next slide) got effectively derailed and then reinvented during COVID.

DWR/OPUD EDUCATION PROGRAM

PROJECT DESCRIPTION

A pilot program for 4th grade

Collaborate with TEACHERS -

- TO EDUCATE STUDENTS IN A HANDS ON, ENGAGING WAY
- ALIGNED w/ Next Generation Science STANDARDS

And... WHICH RAISED AWARENESS about

- 1 The Water Cycle
- 2 Where Their Water Comes From
- 3 Water Conservation



SALMON RUN

Prepare w/ Board INFO
History & current day link to Indigenous PPL
Water Testing
observation of Salmon
Pond Efforts (w/ Moll)

IMPACT: 150 students/year

EXPERIMENT BOX

All the supplies I need!
Cool
Water purifying
water cycle
water shed
I got it!

IMPACT: TEACHERS HAVE RESOURCES, STUDENTS ARE ENGAGED!

WATER ASSEMBLY

(with Syrcce)
The Great Water Mystery
fun!
most kids don't realize
interactive

IMPACT: REINFORCED EXPERIENTIAL AND CLASSROOM LEARNING & FUN!

WATER DAY

STUDENTS SHARE/USE THEIR WORK
family, caregivers, OPUD all ATTEND
What's what I learned!
Get Certificate!
Gift Cards
Spanish Translation

IMPACT: PUD PARENTS & STUDENTS THE LEARNING GOES HOME OPUD GETS credit for their support

WATER AMBASSADORS DAY

STUDENTS NERVENOUS TO present (proud) family attend
certificates accolades
OPUD Board

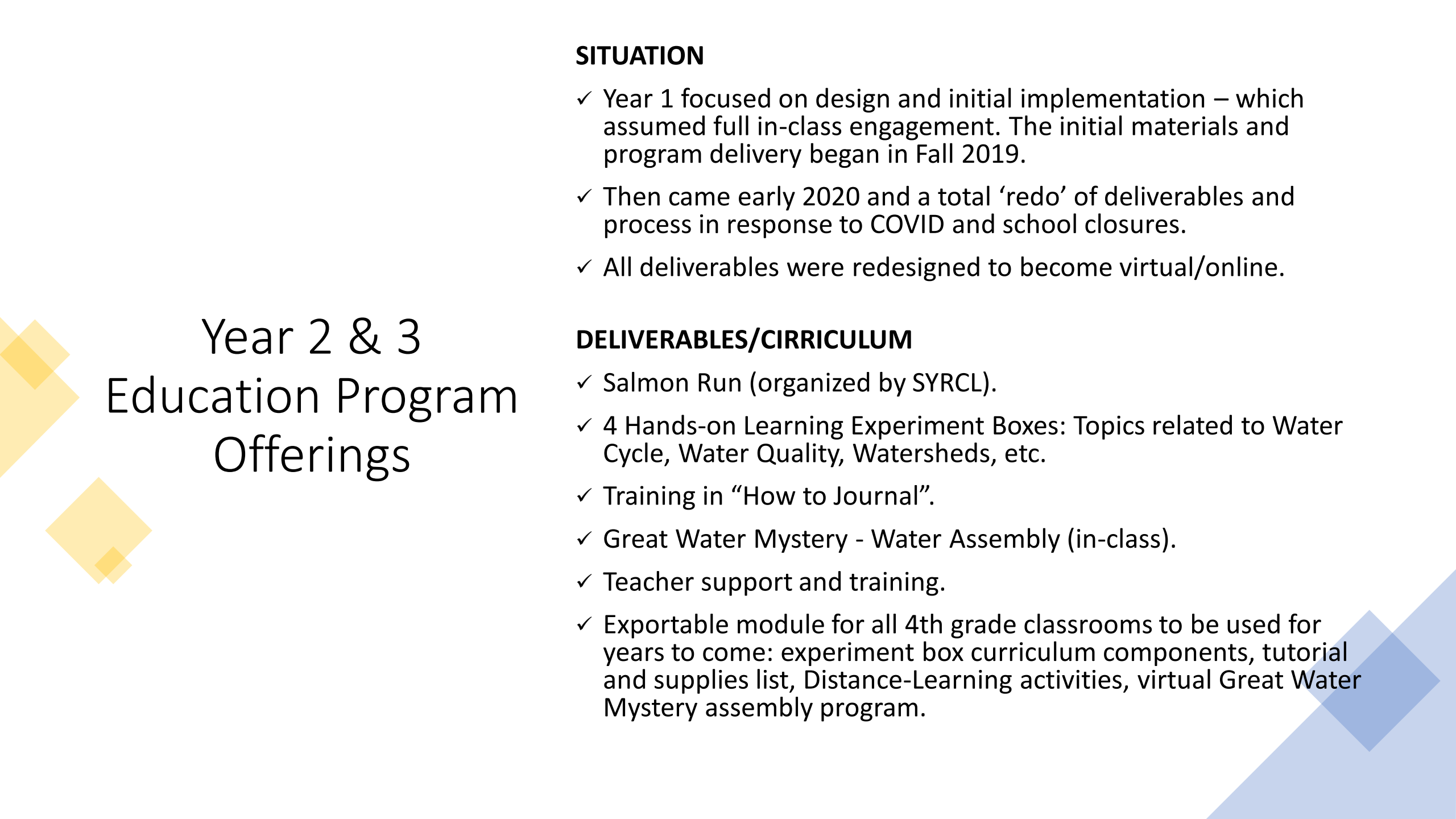
STUDENTS IMPROVE SPEAKING/PRESENTATION SKILLS
OPUD BOARD ENGAGED/CONNECTED

EVALUATION

Qualitative AND Quantitative
Audio Journals
Video
Surveys Before During & After

INFORMS
Where we go Next

Expand to other schools & grades w/ OPUD DISTRICT...



Year 2 & 3 Education Program Offerings

SITUATION

- ✓ Year 1 focused on design and initial implementation – which assumed full in-class engagement. The initial materials and program delivery began in Fall 2019.
- ✓ Then came early 2020 and a total ‘redo’ of deliverables and process in response to COVID and school closures.
- ✓ All deliverables were redesigned to become virtual/online.

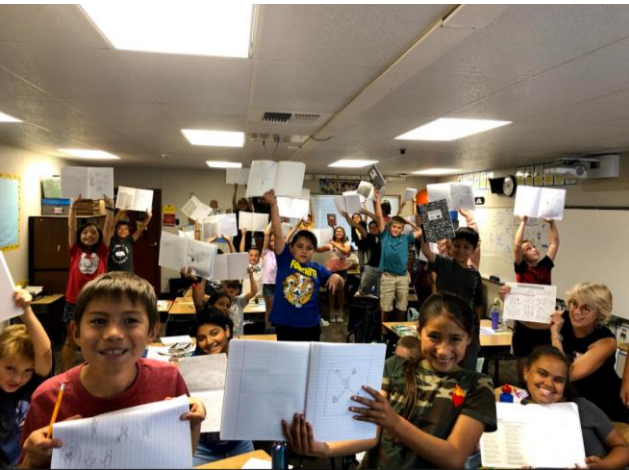
DELIVERABLES/CIRRICULUM

- ✓ Salmon Run (organized by SYRCL).
- ✓ 4 Hands-on Learning Experiment Boxes: Topics related to Water Cycle, Water Quality, Watersheds, etc.
- ✓ Training in “How to Journal”.
- ✓ Great Water Mystery - Water Assembly (in-class).
- ✓ Teacher support and training.
- ✓ Exportable module for all 4th grade classrooms to be used for years to come: experiment box curriculum components, tutorial and supplies list, Distance-Learning activities, virtual Great Water Mystery assembly program.

The STATS

	YEAR 1 PILOT	YEARS 2 AND 3
Number of students who participated in overall program	Apx 80-100	100+
Number of students who participated in Salmon Run Expedition	Apx 300	N/A*
Number of teachers who participated and received support in program	4	7
Number of schools who participated in program	2	2
Number of teacher support meetings	24	12

- ✓ Year 1 (2018-19) Pilot focused on water-related education and water conservation development for 4th grade students' program, with delivery of curriculum materials in Fall of 2019.
- ✓ Year 2 + 3 (2019 – 2020 & 2021 - 2022) additionally included the following standards: Next Generation Science Standards (NGSS), English Language Arts (ELA), Social Emotional Learning (SEL), Math Common Core Standards. The Salmon Run did not occur after Year 1, nor did the Great Water Mystery program.



✓ “This is the best educational program that we have ever had in Olivehurst.”
— Principal

✓ “Oh wow — what you are teaching my son (student) is really awesome and great” — Arboga Parent looking on while a student was engaged with Distance-Learning curriculum components

✓ “It’s so amazing how much these kids take in, we watched a video about washing hands when COVID started and my kids automatically said, ‘They aren’t turning off the water faucet, shame on them for not conserving water!’” — Ella Elementary teacher

✓ “My favorite thing about the field trip was all of it, my favorite was learning about the salmon cycle and their ecosystem” — Student regarding Salmon Run Field Trip