



A place where families and businesses thrive.

CITY RECORDER USE ONLY:

AGENDA ITEM #: E. 3.

MEETING DATE: 09/12/2022

FINAL ACTION: _____

CITY COUNCIL STAFF REPORT

TO: *City Council*

FROM: *Jesse VanderZanden, City Manager*

PROJECT TEAM: *Zoe Morrison, 2022 CECOP Intern
Greg Robertson, Public Works Director
Rich Blackmun, Engineering Division Manager*

MEETING DATE: *September 12, 2022*

SUBJECT TITLE: *2022 CECOP Engineering Intern Accomplishments*

ACTION REQUESTED:

	Ordinance	Order	Resolution	Motion	X	Informational
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X all that apply

The City of Forest Grove has been an industry member of the Civil Engineering Cooperative Program (CECOP) for over 6 years now. CECOP provides engineering college students the opportunity to complete two 6-month civil engineering internships while they are completing their undergraduate degree. This program includes students from Portland State, Oregon State, Oregon Tech, and University of Portland, while the majority of the CECOP private company and public agency members are from Oregon and Washington.

Students must apply for membership in CECOP during their sophomore year, though the program does occasionally accept juniors. To be admitted into CECOP, each student must successfully pass two separate screening processes; one by an academic advisor from their university and a follow-up in-person interview by a panel of industry representatives. The purpose of the two screenings is to ensure that a student has the technical and personality and behavior skills required to successfully complete an internship.

Zoe Morrison is the sixth CECOP intern hired by the City of Forest Grove. During her internship Zoe worked on various projects and performed numerous construction inspections. Like the other 5 interns, Zoe has exceeded our expectations for the quantity and quality of the work she completed during her internship.

ATTACHMENT(s): CECOP Presentation September 12, 2022



CECOP INTERNSHIP

Spring-Summer 2022

Zoe Morrison

DATE 09/12/2022

DEPARTMENT INTERACTION

WITHIN THE CITY

- Public Works
- Community Development
- Building Department
- Parks & Recreation
- Legislative and Executive

RESOURCES

- MUTCD
- ODOT
- United States Access Board

OUTSIDE THE CITY

- Contractors
- Engineering Firms
- Product Manufacturers
- Clean Water Services
- Joint Water Commission
- Washington County
- Metro

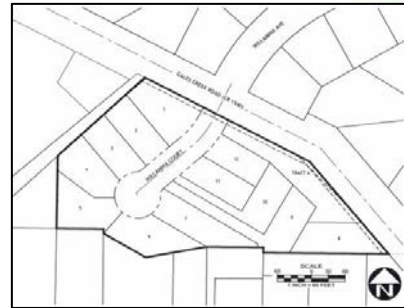
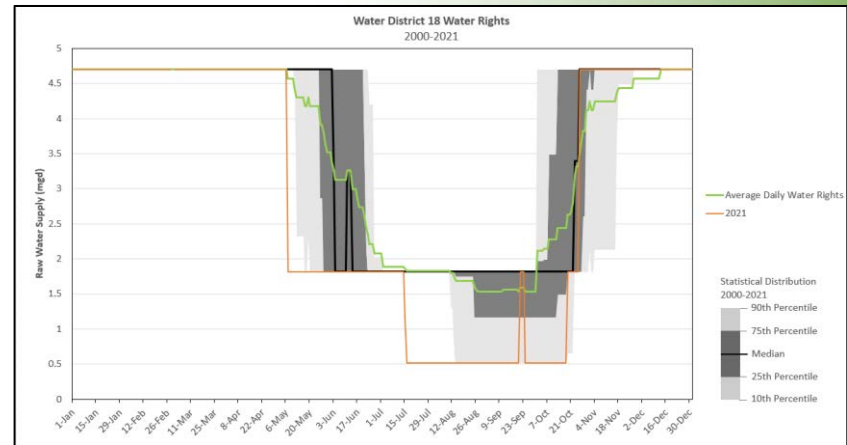


PROJECTS

- 30+ projects
- Majority of work for subdivision development

Major projects:

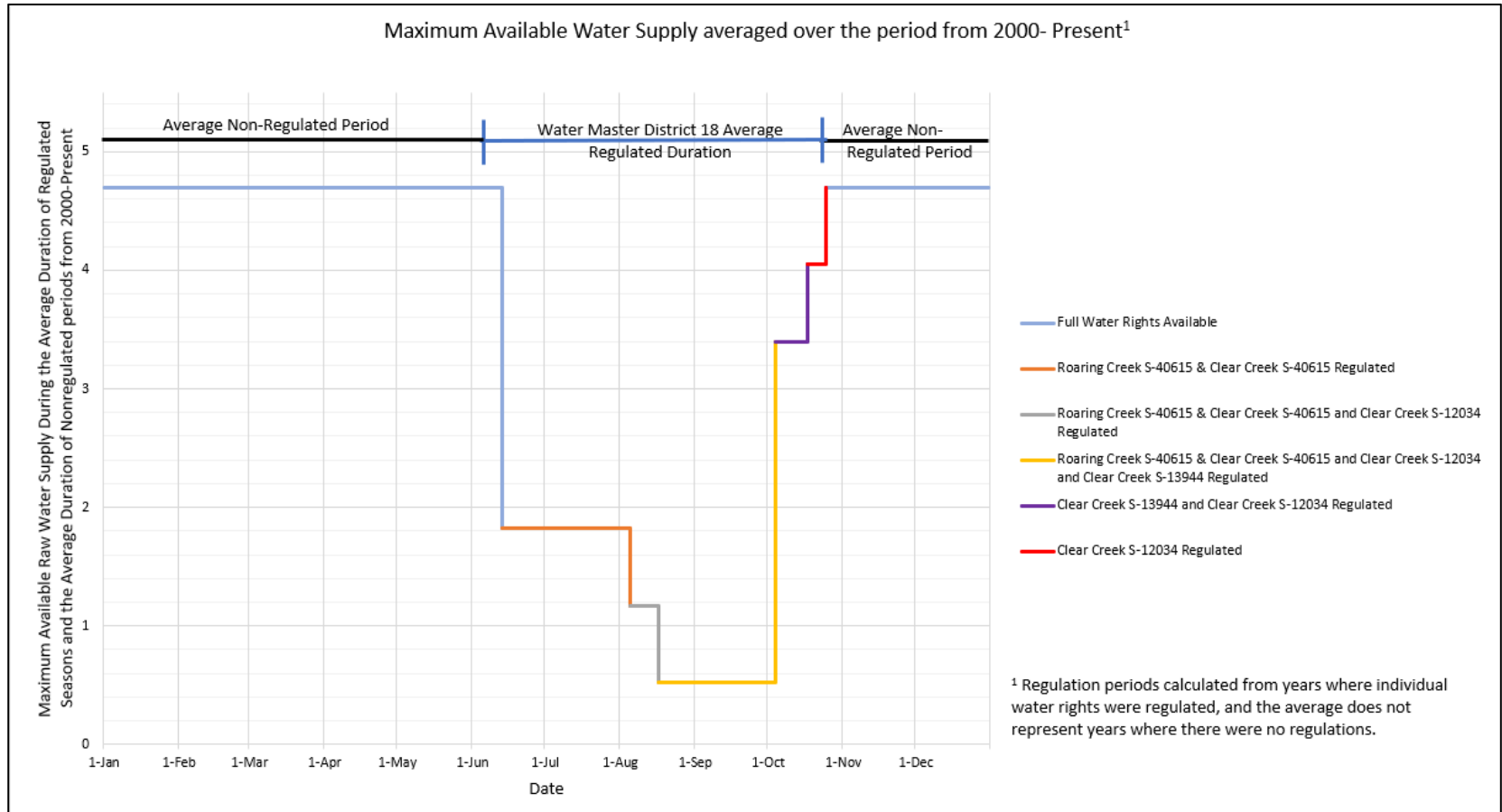
- Water Rights Regulation Data
- WSMP CIP Sheets
- Subdivision Plan Reviews
- ARTS
- Inspections



Acronym	Meaning
A	
AAACE	Association for the Advancement of Civil Engineering
AASHTO	American Association of State Highway and Transportation Officials
AB	Aggregate Base
ABA	Architectural Barriers Act
ABS	Asbestos
AC	Asphalt Concrete
ACI	American Concrete Institute
ADA	Americans with Disabilities Act of 1990
ADD	Average Day Demand
AAAD	Automated Flag Assistance Devices
APCP	Alternate Pedestrian Circulation Path
APS	Accessible Pedestrian Signals
ARS	Arsenic
ASTM	American Society for Testing and Materials
B	
BCD	Bicycle Channelizing Device
C	
C of O	Certificate of Occupancy
CATV	Community Antenna Television
CCI	Construction Cost Index
CCP	Concrete Cylindrical Pipe
CCS	Corrosion Control Study
CIP	Capital Improvement Program
CFGS	City of Forest Grove
CPM	Critical Path Method
CSZ	Cascadia Subduction Zone
CWS	Clean Water Services
CWS	Community Water Systems
D	
D	Stormwater Line
D/DBPR	Disinfectants and Disinfection Byproducts Rule
DBP	Disinfection Byproducts
	Department of Environmental Quality

PROJECTS

WATER RIGHTS REGULATION DATASET

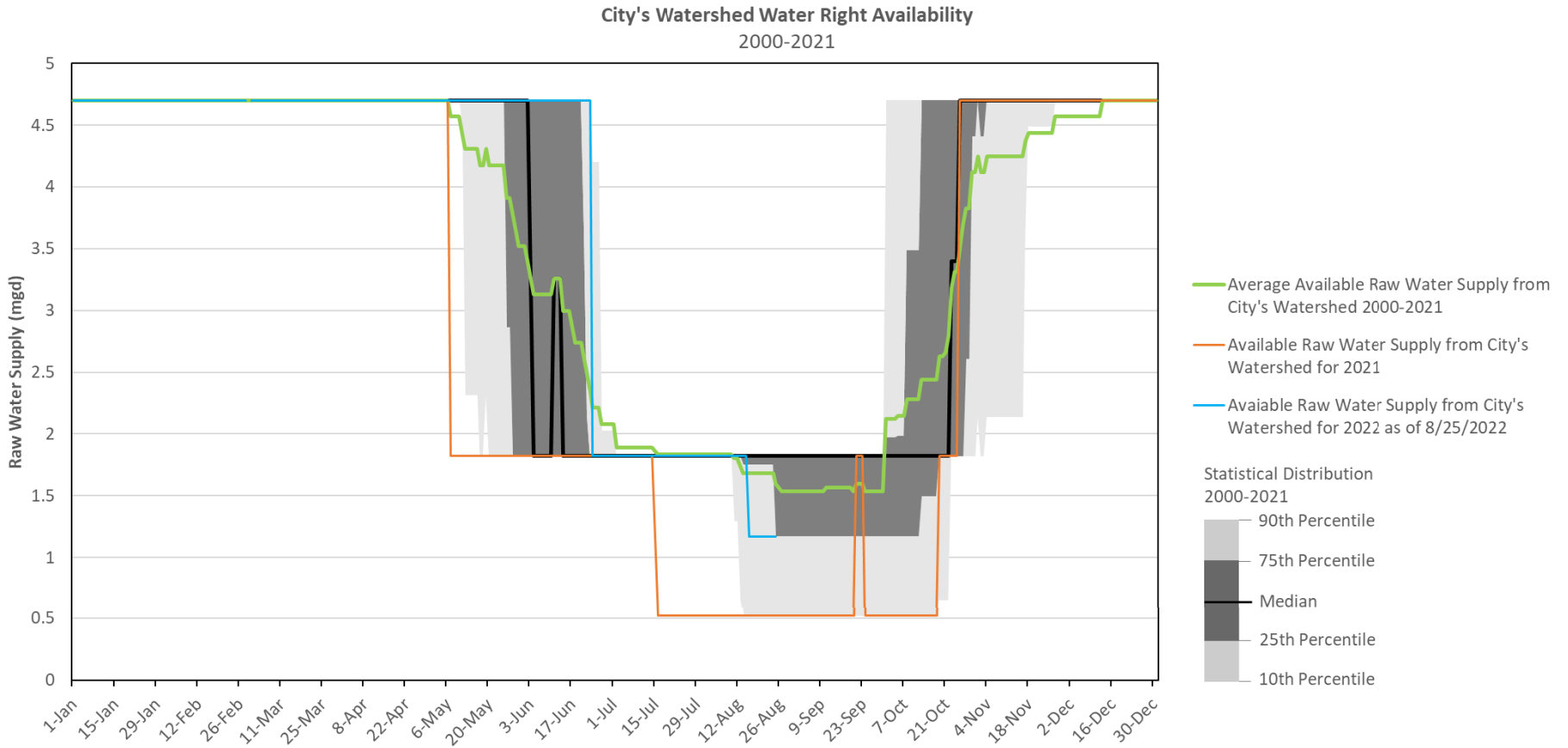


TASKS

- Analyze previous data collected
- Use Excel formulas to reduce user input

PROJECTS

WATER RIGHTS REGULATION DATASET



PROJECTS

WATER SYSTEM MASTER PLAN CIP SHEETS

TASKS:

- Synthesize water system construction improvement projects from multiple master plans
- Compared this information to current water system
- Create CIP Project Sheets that mimic ones within the 2021 WSMP



CIP Project HDR_DP02

Project Type: HDR Improvements - New Pipe

Project Description: Harvey Clark Elementary, looping from 26th Ave to Camino Dr on B St, 8" pipe, 800 ft.

Project Need: Flow/pressure improvements on the distribution and piping system

Expected Timeframe: 11-20 years

Priority:

Project Cost: \$220,000

Project Phasing:

- Prior WMP Improvements, New Piping
- Prior WMP Improvements, Upsize Existing
- Transmission Improvements
- SRP Improvements
- Fire Flow Improvements
- 368



Water System
Master Plan

CIP Project Sheets

PROJECTS

WEST SYSTEMIC SIGNALS AND ILLUMINATION (ARTS)

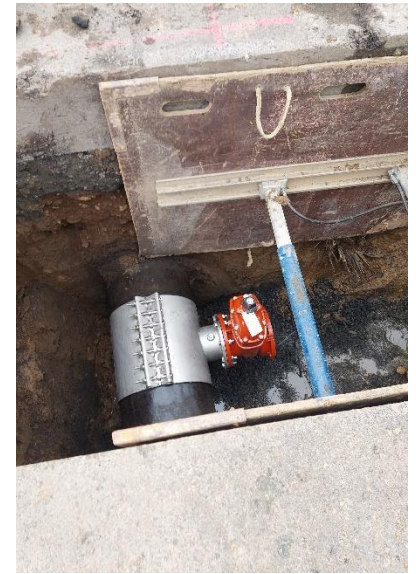
TASKS:

- Site visits to pedestrian pushbutton intersections
 - Pacific Ave & Elm St
 - 19th Ave & Elm St
 - Pacific Ave & Maple St
- Update drawing set to incorporate new information
- Replacement of street signs at signalized intersections



PROJECTS

INSPECTIONS



WHAT I LEARNED

SOFT SKILLS

- Attention to detail
- Self-management
- Professional communication
- Problem solving

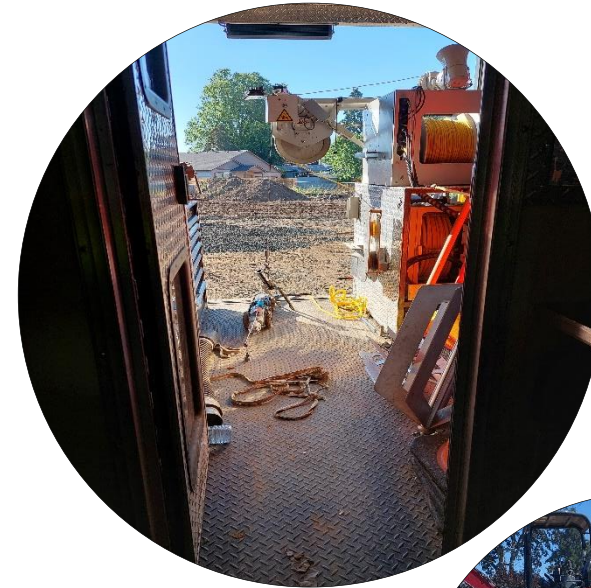
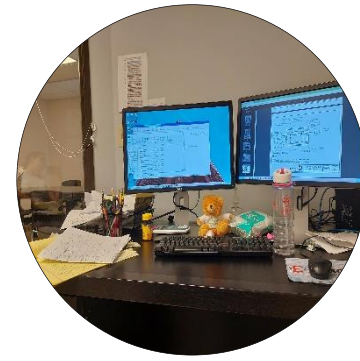
TECHNICAL SKILLS

- Excel formulas and PivotTables
- AutoCAD
- Comprehension of contract and bid documents
- Technical writing
- Research skills



OVERALL IMPRESSION

- Amazing project variety
- Seeing all the stages of the engineering and construction process
- Friendly and accommodating coworkers
- Experiencing all of the different perspectives that revolve around a project
- 85% office / 15% field





QUESTIONS?