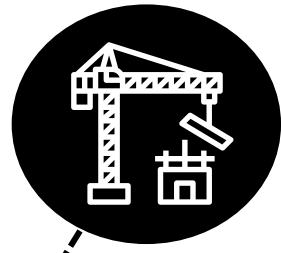




WATER SYSTEM DEVELOPMENT UPDATE

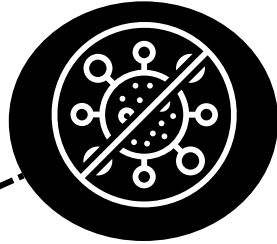
2025 UPDATE

UTILITIES & ENGINEERING SERVICES



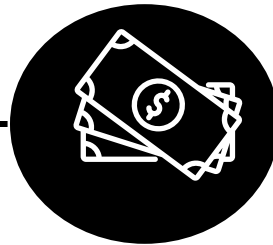
Construct

Construct new Water Treatment Plant to provide main campus water quality meeting EPA and FDEP health and safety standards.



Health & Safety

Eliminates risk from EPA mandated 2029 regulatory and compliance changes.



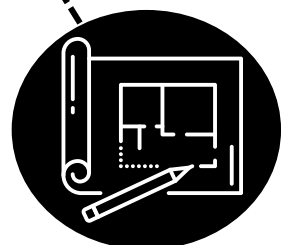
Funding

UES self-funded through energy savings, CHP utility savings, and Carryforward requests.



Increase

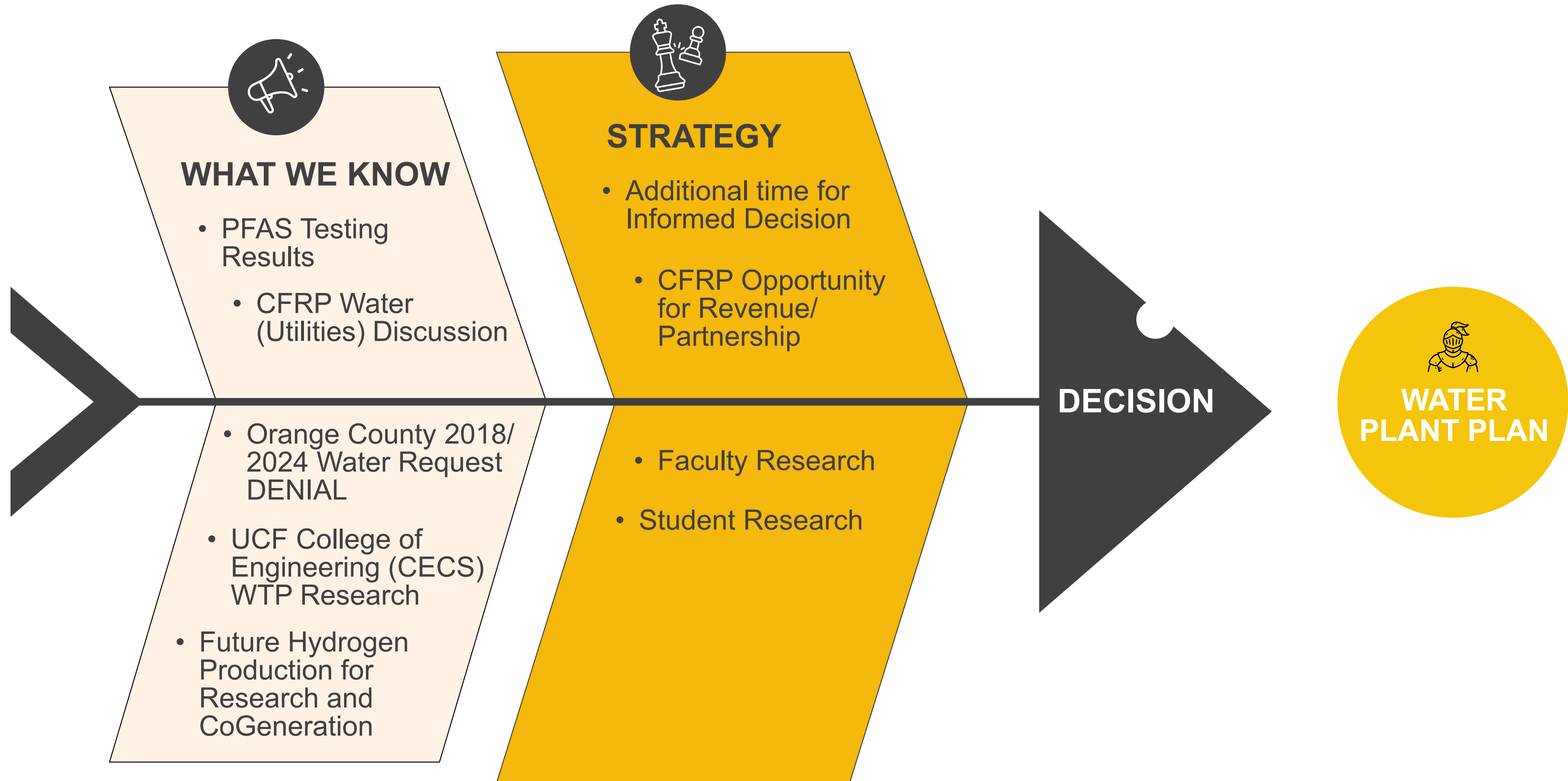
Includes higher capacity wells, ozone, granulated activated carbon, (GAC) and larger storage.



Projects

The project will be divided into three subprojects: new potable wells/new potable water facility building, lots, retention basin/new water treatment plant, GAC, pumps, and ozone.

2025 UPDATE



What We Know 2025



OCU Submissions

- In 2018 UES submitted for OCU to provide potable water to the university. At that time OCU denied the request.
- Many factors in 2018 provided the denial letter including limited CUP capacity for OCU.



OCU Strategy

- In October 2023 UCF resubmitted to OCU, but this time included language for transferring underground distribution infrastructure and water sampling from UCF to OCU.
- May 2024 OCU will provide water to UCF but **WILL NOT** accept UCF distribution system, thus keeping UCF a Public Water System and still responsible for testing.



EPA MANDATE

- The U.S. Environmental Protection Agency (EPA) proposed the first national primary drinking water standards for six per- and polyfluoroalkyl substances (PFAS) in March 2023. The proposal would establish maximum contaminant level goals (MCLGs) and maximum contaminant levels (MCLs) for six PFAS.
- In December 2023 the EPA submitted an updated Second Annual Progress Report for the EPA's PFAS Strategic Roadmap. The commitment to confront PFAS contamination is being taken head on.
- In May 2024 the EPA is announced the six PFAS standards, 2027 monitoring and reporting in the CCR, and 2029 system compliance with posted MCL levels.
- UCF is responsible for meeting the new regulatory deadlines to provide clean safe drinking water and future regulatory limits around Disinfection Byproducts (DBP)

PFAS



FIREFIGHTING
FOAMS



MICROWAVE
POPCORN BAGS



WATER RESISTANT
CLOTHING



PAINT



STAIN RESISTANT
PRODUCT



PERSONAL
CARE PRODUCTS

PFAS IN PRODUCTS



COSMETICS



NON-STICK
COOKWARE



FAST FOOD
PACKAGING



STAIN RESISTANT
FURNITURE



PHOTOGRAPHY



PESTICIDES

PFAS

<i>PROPOSED DRINKING WATER STANDARDS</i>	<i>CRITICAL HEALTH ENDPOINT</i>	<i>MCL (PPT)</i>	<i>UCF (PPT)</i>
Perfluorooctanoic acid (PFOA)	Cancer	4	1.4
Perfluorooctanesulfonic acid (PFOS)	Cancer	4	1.4
Perfluorohexanesulfonic acid (PFHxS)	Thyroid Effects	10	Not detectable
Perfluorononanoic acid (PFNA)	Developmental Effects	10	Not detectable
Hexafluoropropylene dimer acid (HFPO-DA) and its ammonium salt	Liver Effects	10	Not detectable
Perfluorobutanesulfonic acid (PFBS), PFHxS, PFNA, and HFPO-DA and their salts	Multiple	Hazard Index of 1	0

OTHER FACTORS

DISCUSSION TOPICS

- September 2023 meeting with CFRP's Joe Wallace introduced the topic of UCF UES operating CFRP utilities, holistically.
- If properly planned, UCF's new water treatment plant provides opportunities for students to obtain knowledge, skills and aptitudes that align with the workforce of the future.

DISCUSSION TOPICS

- UCF's College of Engineering is exploring future research programs and grants in the area of Hydrogen.
- Future water prices are expected to increase exponentially.

RATE INCREASE FOR NEW WATER PLANT COMPARISON

	\$/kGal
UCF Jan 2024	4.22
UCF July 2025	4.91
Seminole County*	8.70
Orange County Utilities	2.00
Orange County Utilities + UCF Distribution/Treatment**	5.91
City of Oviedo (Outside City)	4.87
City of Oviedo (Inside City)	3.90
University of Florida	5.73

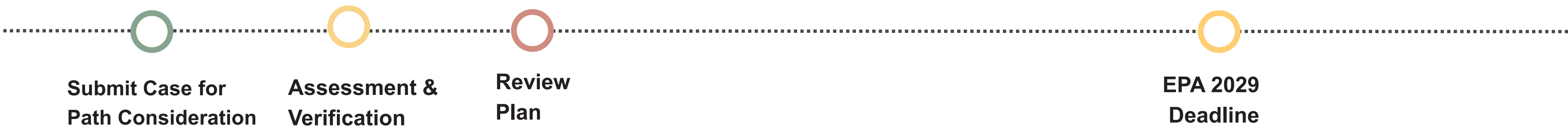
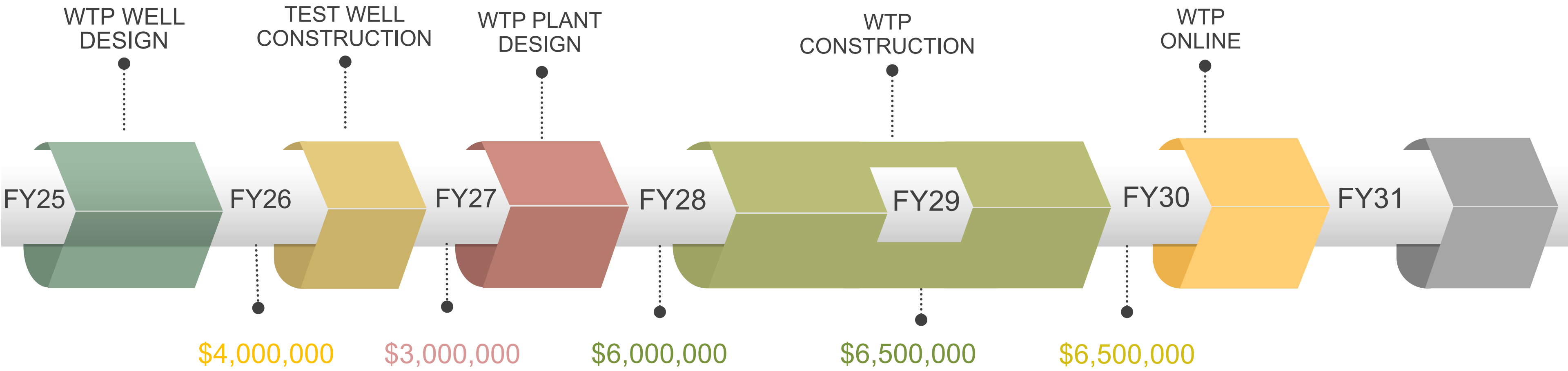
*Uses tiered rate, value based on average UCF customer

** Requires adding treatment to Booster Pump Station ~\$3M, and OCU would take over UCF's CUP.

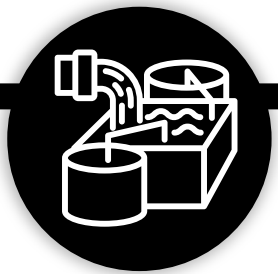


All utility providers must comply with regulatory changes driving the consideration of the water treatment plant, which may result in adjustments to rates accordingly.

Five-Year Plan



TERMS



Water Treatment Plant (WTP)

Water treatment plant utilized to provide finished high quality potable drinking water to the university community including Siemens, Celsete Hotel, and Research Park.



Central Florida Research Park (CFRP)

The Central Florida Research Park is a 1027 acre campus like office park environment for business, located adjacent to the University of Central Florida.



Per- and Polyfluorinated Substances (PFAS)

A group of chemicals used to make fluoropolymer coatings and products that resist heat, oil, stains, grease, and water. Fluoropolymer coatings can be in a variety of products like clothing, furniture, adhesives, food packaging, heat-resistant non-stick cooking surfaces, and the insulation of electrical wire.



Environmental Protection Agency (EPA)

A Federal agency whose mission is to protect human health and the environment.



Orange County Utilities

Orange County Florida utilities division under the current leadership of Mayor Jerry Demings.





