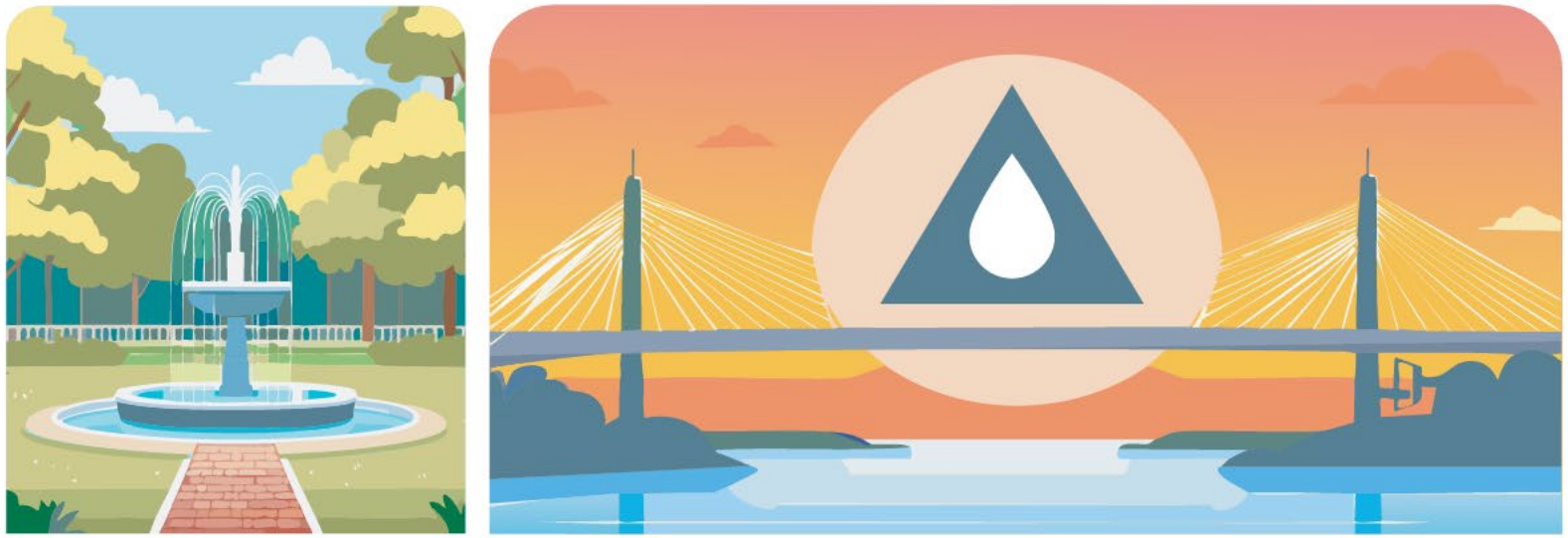


2025 NATIONAL CONFERENCE | SAVANNAH, GEORGIA

California's Model Water Efficient Landscape Ordinance: What works, what doesn't work, and challenges for the future

Model Water Efficient Landscape Ordinance (MWELO)

History

- In 1990, AB 325 created the Water Conservation in Landscaping Act requiring the Department of Water Resources (DWR) to develop a Model Water Efficient Landscape Ordinance (MWELO).
- In 1993, MWELO was adopted and required all local agencies to adopt a water efficient landscape.
- In 2006, AB 1881 required DWR to update the MWELO.
- In 2010, the updated MWELO went into effect.
- In late 2015, updated MWELO went into effect in response to Governor's mandate during 2012 – 2016 drought.
- In 2018, Governor approved AB 2371 Landscape Water Use Efficiency:
  - Requiring DWR to update MWELO every 3 years
  - Requiring DWR to "consider" revising the Water Use Classification of Landscape Species (WUCOLS) publication
- In 2025, MWELO update was implemented.
- Since inception: 35 years!!!!

Model Water Efficient Landscape Ordinance (MWELO)

Purpose

- The State Legislature has found that the waters of the state are of limited supply and are subject to ever increasing demands.
- The continuation of California's economic prosperity is dependent on the availability of adequate supplies of water for future uses.
- Landscapes are essential to the quality of life in California by providing areas for active and passive recreation.
- To use water efficiently without waste by setting a Maximum Applied Water Allowance (MAWA) as an upper limit for water use and reduce water use to the lowest practical amount.

California MWELO = Irrigation Association Terminology

Performance Approach = Landscape Water Budget

Maximum Applied Water Allowance (MAWA) = Upper Boundary (UB)

Estimated Total Water Use (ETWU) = Lower Boundary (LB)

Irrigation Efficiency (IE) = Distribution Uniformity (DU)

Evapotranspiration Adjustment Factor (ETAF) = Landscape Coefficient (KL)

Water Use Classification Of Landscape Species (WUCOLS) = Plant Factor (PF)

California MWELO versus Irrigation Association Equation

MAWA = (ETo) (ETAF) (LA) (0.62)

ETo = Reference Evapotranspiration (from CIMIS)

ETAF = Evapotranspiration Adjustment Factor

- 0.45 for Commercial
- 0.55 for Residential

} Landscape coefficient [K_L]

LA = Landscape Area (square feet)

0.62 = Conversion factor (to gallons)

Upper Boundary = (ETo) (K_L) (LA) (0.62)

ETo = Reference Evapotranspiration (from CIMIS)

K_L = Landscape coefficient [$K_L = K_P \times K_d \times K_{mc}$]

- K_P = Plant Factor
- K_d = Vegetation density factor
- K_{mc} = Microclimate factor

LA = Landscape Area (square feet)

0.62 = Conversion factor (to gallons)

ETWU = (ETo) (0.62) (PF*LA)/IE

ETo = Reference Evapotranspiration (from CIMIS)

PF = Plant Factor (from WUCOLS)

LA = Landscape Area (square feet)

0.62 = Conversion factor (to gallons)

IE = Irrigation Efficiency

- 0.75 overhead
- 0.81 sub-surface

} Distribution Uniformity [DU]

Lower Boundary = (ETo) (0.62) (K_L*LA)/DU

ETo = Reference Evapotranspiration (from CIMIS)

K_L = Landscape coefficient [$K_L = K_P \times K_d \times K_{mc}$]

- K_P = Plant Factor
- K_d = Vegetation density factor
- K_{mc} = Microclimate factor

LA = Landscape Area (square feet)

0.62 = Conversion factor (to gallons)

DU = Distribution Uniformity

MWELO Performance Approach: How does it work?

Maximum Applied Water Allowance (MAWA) > Estimated Total Water Use (ETWU)

MAWA = (ETo) (ETAF) (LA) (0.62)

MAWA = Maximum Applied Water Allowance
ETo = Reference Evapotranspiration (from CIMIS)
ETAF = Evapotranspiration Adjustment Factor (0.45 or 0.55)
LA = Landscape Area (square feet)
0.62 = Conversion factor (to gallons)

>

ETWU = (ETo) (0.62) (PF*LA)/IE

ETWU = Estimated Total Water Use
ETo = Reference Evapotranspiration (from CIMIS)
PF = Plant Factor (from WUCOLS)
LA = Landscape Area (square feet)
0.62 = Conversion factor (to gallons)
IE = Irrigation Efficiency (0.75 overhead and 0.81 sub-surface)

CIMIS Historical Monthly ETo Values (inches), Davis

Stn Id	Stn Name	CIMIS Region	Jan (in)	Feb (in)	Mar (in)	Apr (in)	May (in)	Jun (in)	Jul (in)	Aug (in)	Sep (in)	Oct (in)	Nov (in)	Dec (in)	Total (in)
6	Davis	SAV	1.32	2.12	3.69	5.50	7.26	8.23	8.35	7.37	5.72	4.16	2.06	1.25	57.03

CIMIS website: https://cimis.water.ca.gov

SmartLandscape @ UC Davis

Spring Team 2024

Winter Team 2024

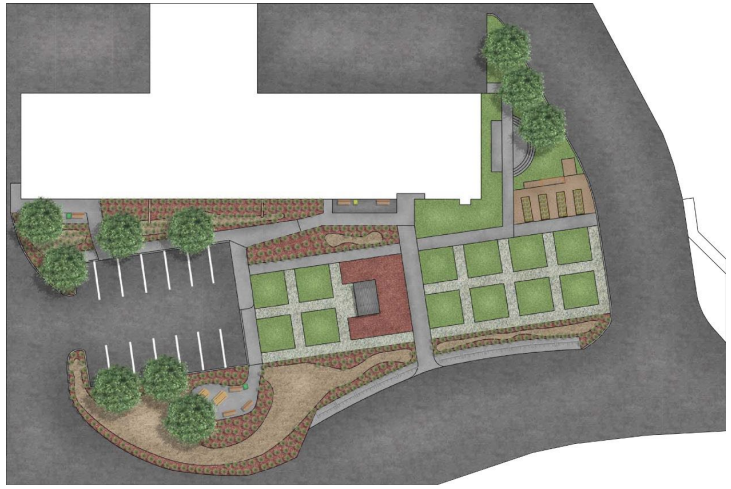
Fall Team 2025

SmartLawn

SmartScape I

SmartScape II

Western Center for Agricultural Equipment



Conceptual Design, January 2019

Construction, June 2019

June 2023

What problems are SmartLandscape trying to address?

- Can urban landscape demonstration projects be designed, installed, managed and maintained by undergraduate student teams to meet MWELO?

- Can MWELO compliance be validated by measuring the Actual Water Applied (AWA) to landscape projects compared to the calculated Estimated Total Water Used (ETWU)?

- What are the challenges associated with landscapes designed to meet MWELO?

Select YTD Accomplishments

SmartLawn

Featuring
- Sub-surface Eco-Mat drip blanket
- Sub-surface inline drip irrigation
- Soil Moisture Sensors
- Smart Controllers
- Rotator Nozzles
- Flow Meters
- Inline Fertigation

SmartScape I

Featuring
- Sub-surface Eco-Wrap inline drip
- Soil Moisture Sensors
- Root Zone Watering System
- Smart Controller
- Flow Meter
- Inline Fertigation

SmartScape II

Featuring
- Sub-surface Inline Drip
- Flow Meter
- Inline Fertigation
- Smart Controller

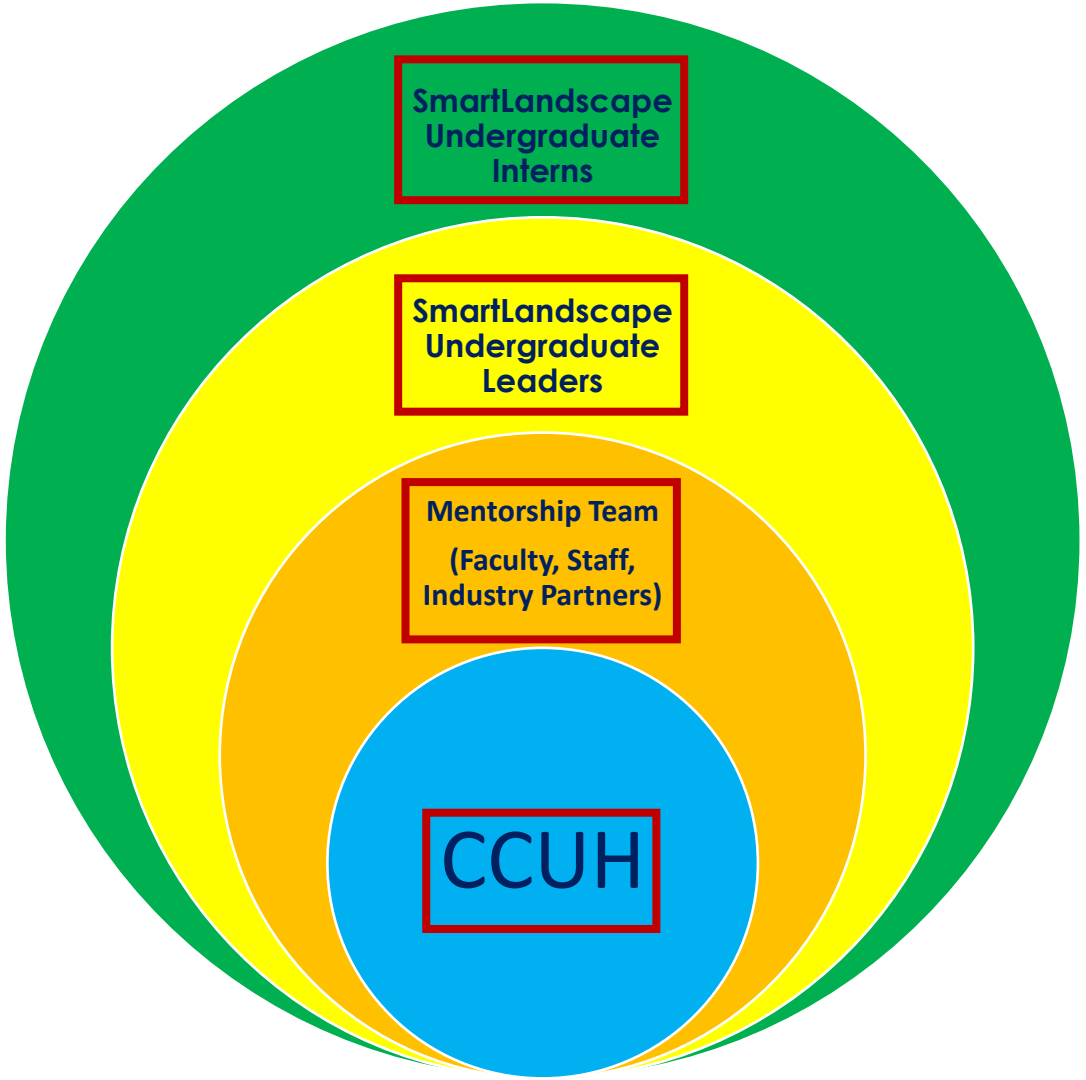
SmartScape III

Featuring
- Surface Inline Drip
- Flow Meters
- Soil Moisture Sensors
- Inline Fertigation
- Smart Controller

SmartScape IV

Featuring
- Surface Inline Drip
- Point Source Drip
- Flow Meters
- Soil Moisture Sensors
- Inline Fertigation
- Smart Controller

Organizational Design
SmartLandscape Student Teams



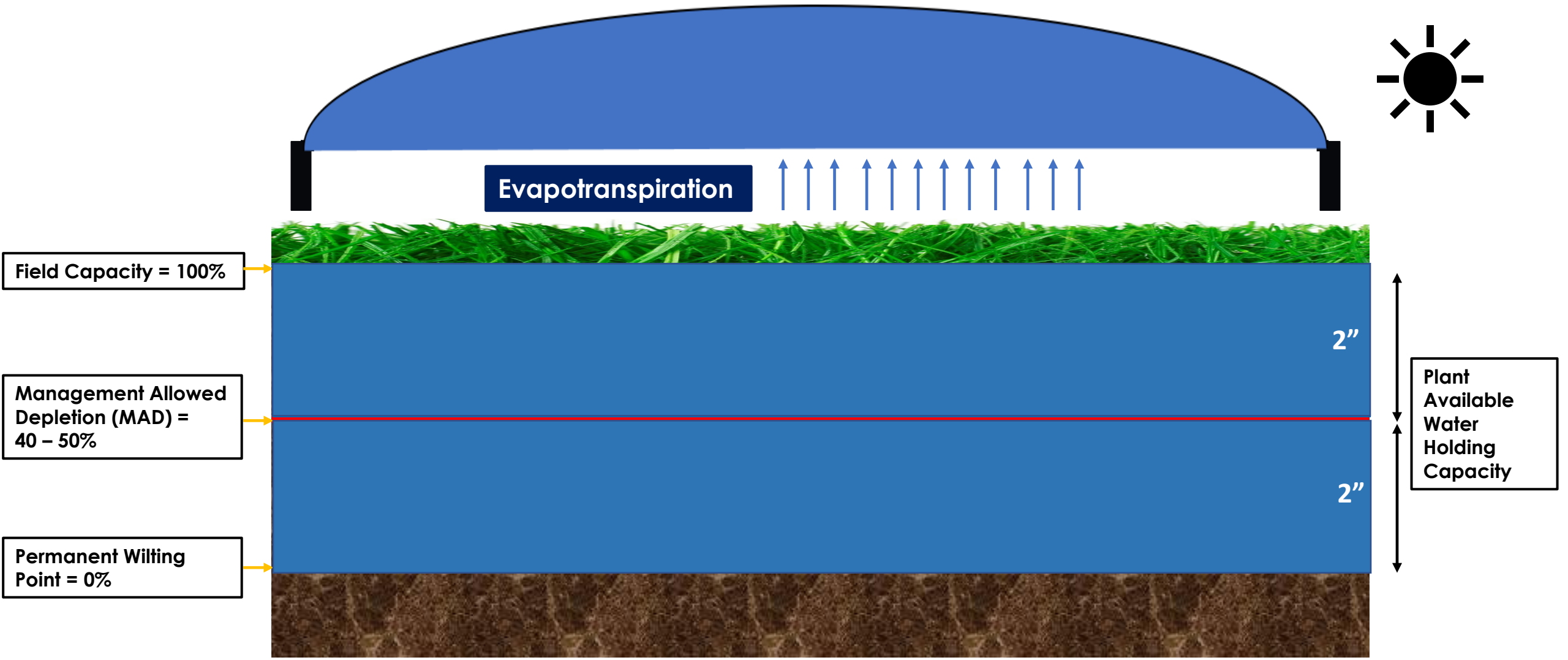
UC Davis Undergraduates → **Experiential Learning** → Industry and Graduate School

SmartLandscape Industry Partners

Live to Garden
Garden to Live
GardenEnlightenment.com

What strategy should be used for irrigating landscape plants?

1. Irrigation should occur based on plant response to environmental demand = Evapotranspiration (ET). ET for specific CA regions is provided by DWR CA Irrigation Management Information System (CIMIS) website.
2. Irrigation frequency and amount will be defined by the environmental demand, soil water-holding capacity, plant root zone depth, and slope.
3. Irrigation should be applied such that the soil water reservoir is filled, and gravity drainage and runoff do not occur.
4. Thus, replacing water lost through ET after triggering of an irrigation event, typically 40-50% Management Allowable Depletion (MAD).


Evapotranspiration
Field Capacity = 100%
Management Allowed Depletion (MAD) = 40 – 50%
Permanent Wilting Point = 0%
2”
2”
Plant Available Water Holding Capacity

SmartLawn Overview

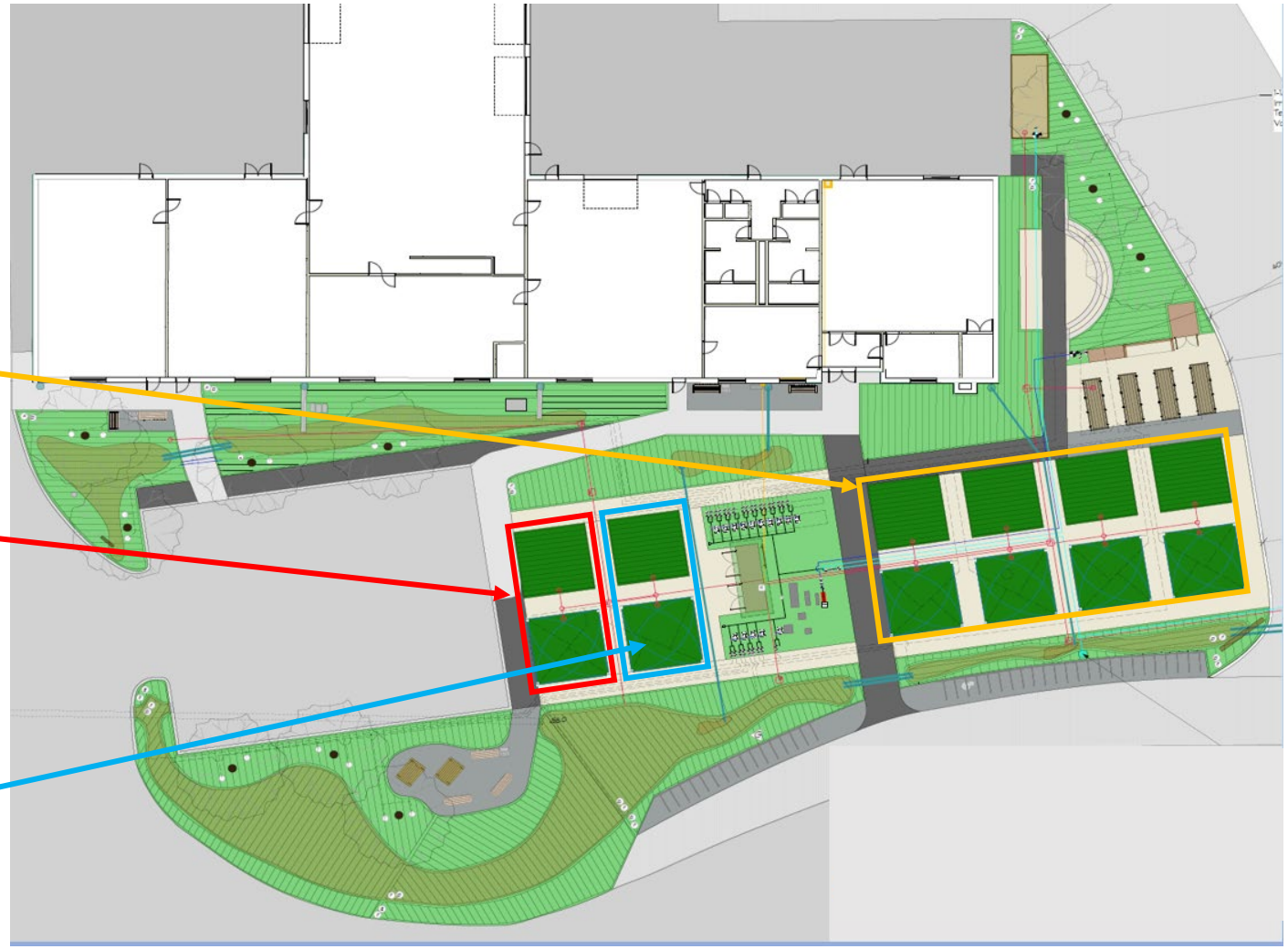
SmartLawn Conceptual Design

SmartLawn **at SmartLandscape consists of twelve 16' x 16' plots including cool season, warm season, and turf alternative blends.**

8 cool-season plots installed and established.

2 turf alternative plots, Kurapia

2 warm-season plots, UC Verde Buffalograss



SmartLawn Plot Configuration

Sub-surface (Eco-Mat) and Surface Irrigation (MP Rotator Nozzles)

SmartLandscape @ UC Davis

UCDAVIS California Center for Urban Horticulture


1


2


3


4


5


6


UC Verde Planting Grid


UC Verde Plugs


Cool Season Turf Installation


Eco-Mat Temporary Irrigation System

SmartLawn Surface Irrigation

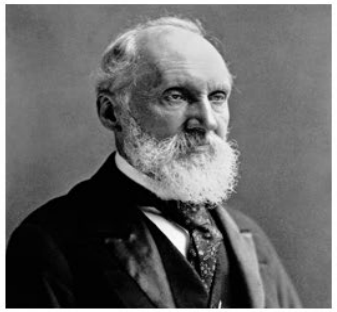
Rotator Nozzle Advantages

- Increases in distribution uniformity
- Generates a water stream reducing the water lost to atmosphere (evaporation)
- Less runoff occurs for clay soils due to lower precipitation rate (inches water/hour)
- Improves low water pressure

Rotator Nozzle

Spray Nozzle

SmartLandscape Premise – Measure Applied Water



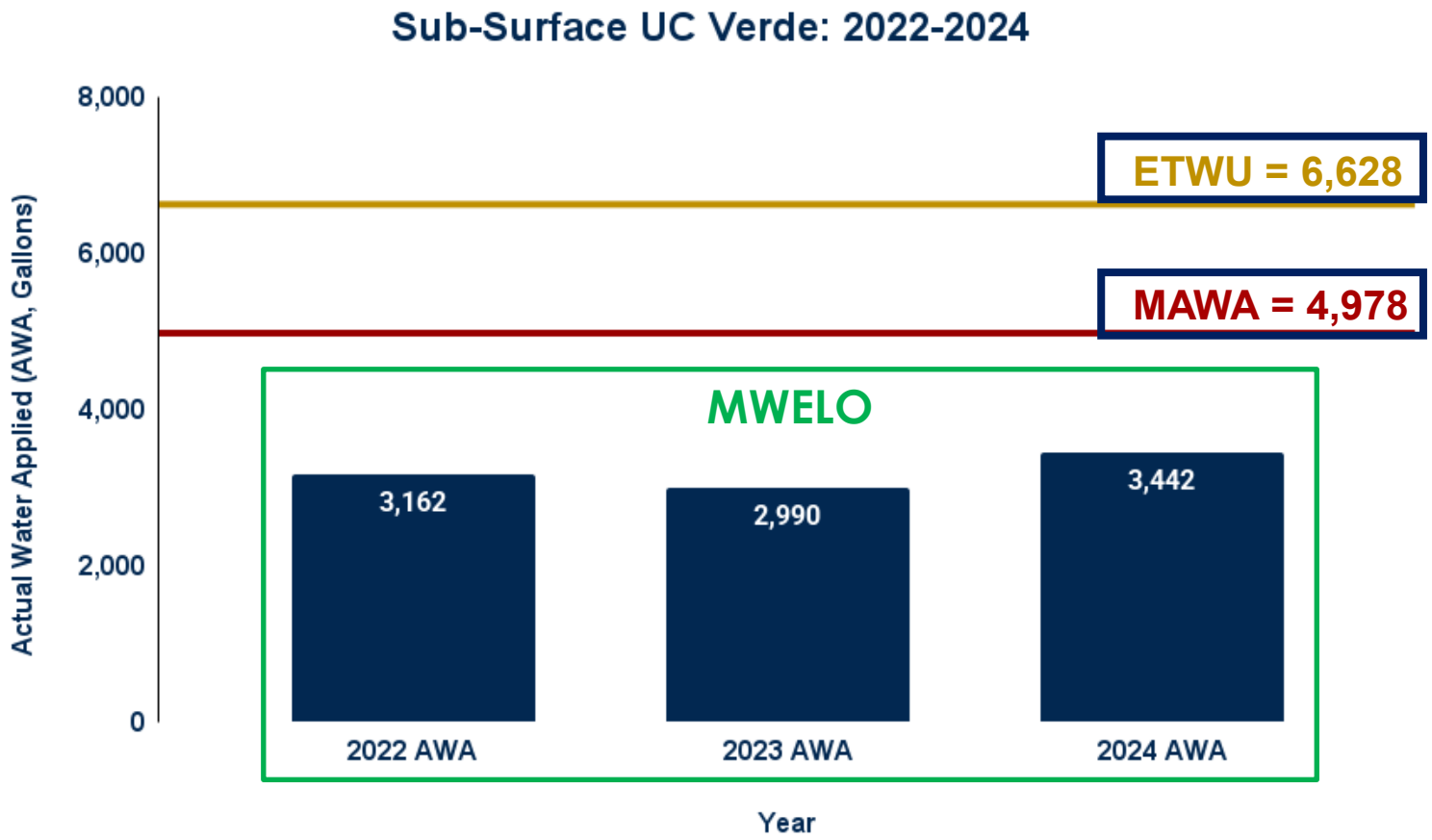
Lord Kelvin - *"To measure is to know. "If you can not measure it, you can not improve it."*

- MWELO is a design standard and "not" a performance standard.
- ETWU is an "ESTIMATE".
- Installed flow meters in each landscape project accurately measures applied water (not estimated, ETWU, as per MWELO).

Sub-surface and Surface Irrigated Warm Season UC Verde Buffalograss Results

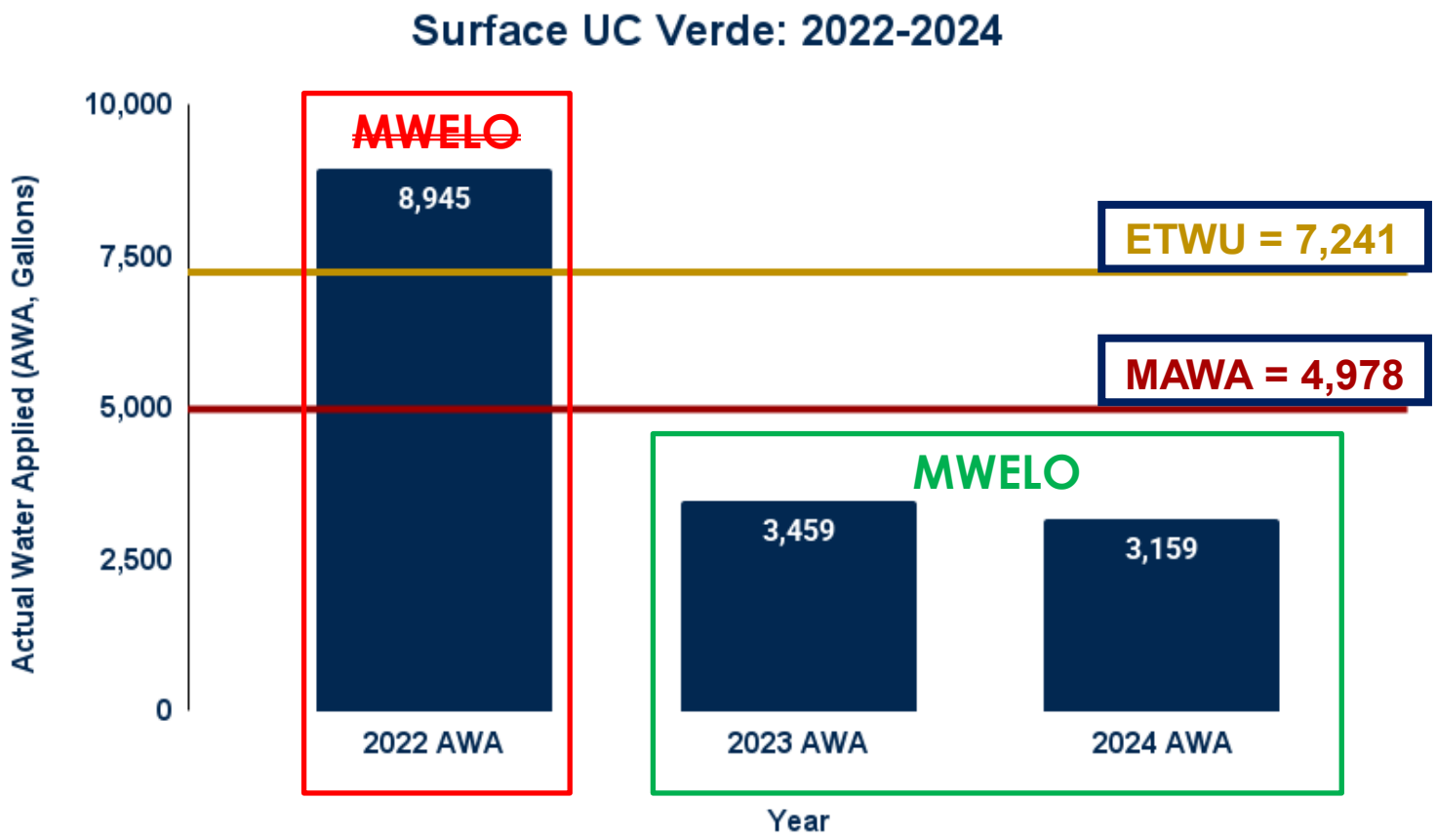
UC Verde Water Budget Calculation
Applied Water (gallons) Compared to MAWA and ETWU

Maximum Applied Water Allowance (MAWA) > **Estimated Total Water Use (ETWU)**



UC Verde Water Budget Calculation
Applied Water (gallons) Compared to MAWA and ETWU

Maximum Applied Water Allowance (MAWA) > **Estimated Total Water Use (ETWU)**



UC Verde Buffalograss: Actual Plant Factor Calculation Using Applied Water

Maximum Applied Water Allowance (MAWA) > **Estimated Total Water Use (ETWU)**

Step 1: ETWU = (ETo) (0.62) (PF*LA)/IE

Step 2: Re-arrange ETWU equation to "solve" for Actual Plant Factor

Step 3: Actual PF = (AWA) x (IE)/(ETo) x (0.62) x (LA)

Step 4: Plug in AWA and solve for Actual PF

Plot	AWA	Act. PF	WUCOLS PF
Sub-surface	3,442	0.31	0.60
Surface	3,159	0.28	0.60

Sub-Surface: UC Verde Buffalograss

Surface: UC Verde Buffalograss

February

May

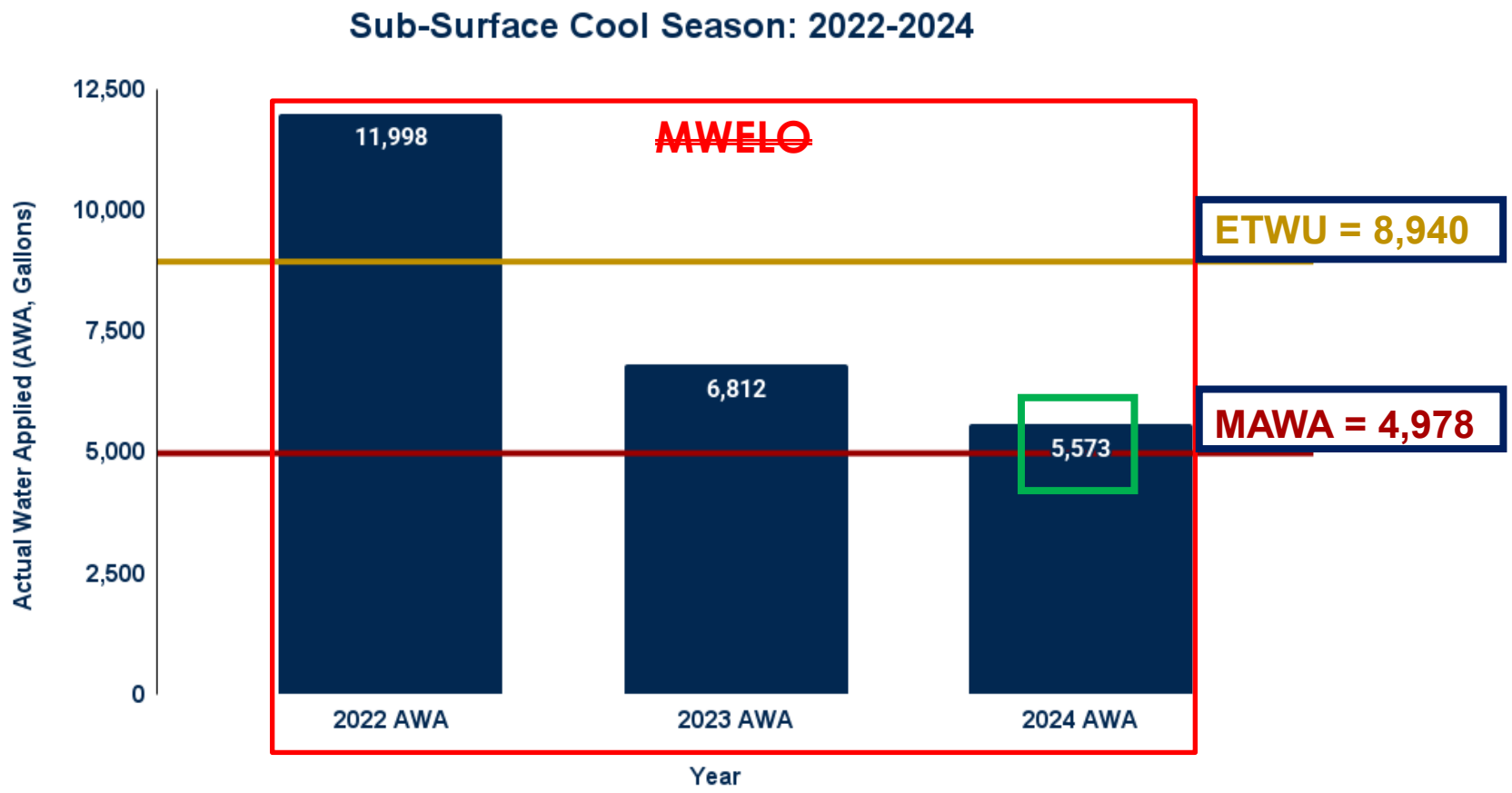
August

November

Sub-surface and Surface Irrigated Cool Season Turfgrass Results

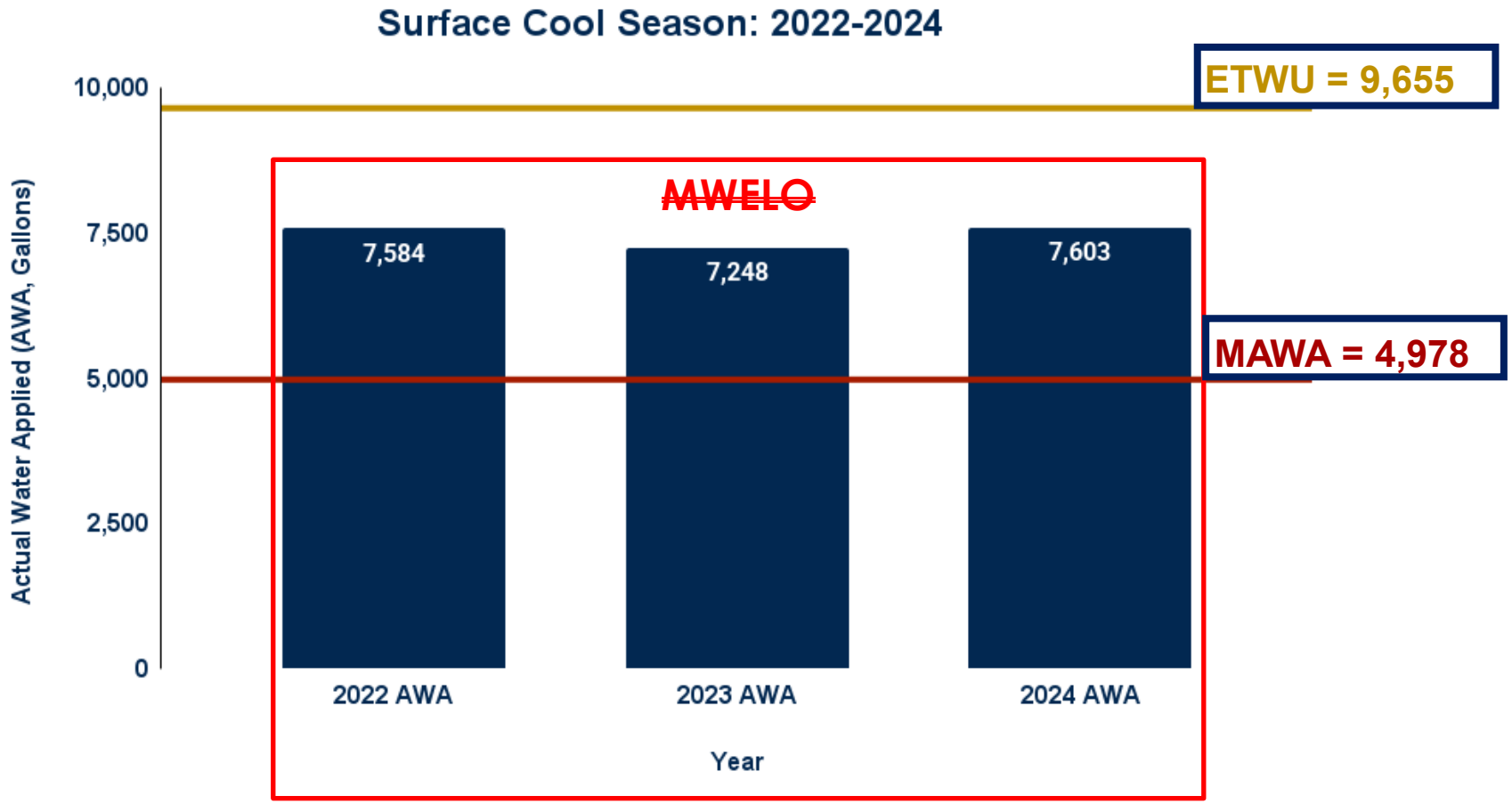
Cool Season Turf Water Budget Calculation
Applied Water (gallons) Compared to MAWA and ETWU

Maximum Applied Water Allowance (MAWA) > **Estimated Total Water Use (ETWU)**



Cool Season Turf Water Budget Calculation
Applied Water (gallons) Compared to MAWA and ETWU

Maximum Applied Water Allowance (MAWA) > **Estimated Total Water Use (ETWU)**



Cool Season Turfgrass: Actual Plant Factor Calculation Using Applied Water

Maximum Applied Water Allowance (MAWA) > **Estimated Total Water Use (ETWU)**

Step 1: ETWU = (ETo) (0.62) (PF*LA)/IE

Step 2: Re-arrange ETWU equation to "solve" for Actual Plant Factor

Step 3: Actual PF = (AWA) x (IE)/(ETo) x (0.62) x (LA)

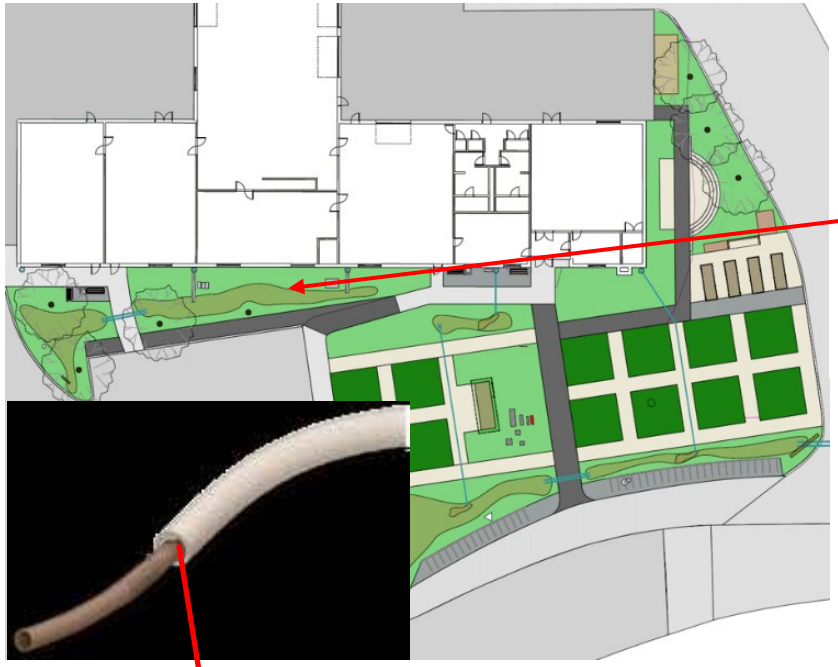
Step 4: Plug in AWA and solve for Actual PF

PLOT	AWA	Act. PF	WUCOLS PF
Sub-surface	5,573	0.50	0.80
Surface	7,603	0.68	0.80

	Sub-Surface: Cool Season Turfgrass	Surface: Cool Season Turfgrass
February		
May		
August		
December		

SmartScape Overview

SmartScape I: 2023 MWELO Water Budget Calculation for North, South and Trees



Note:

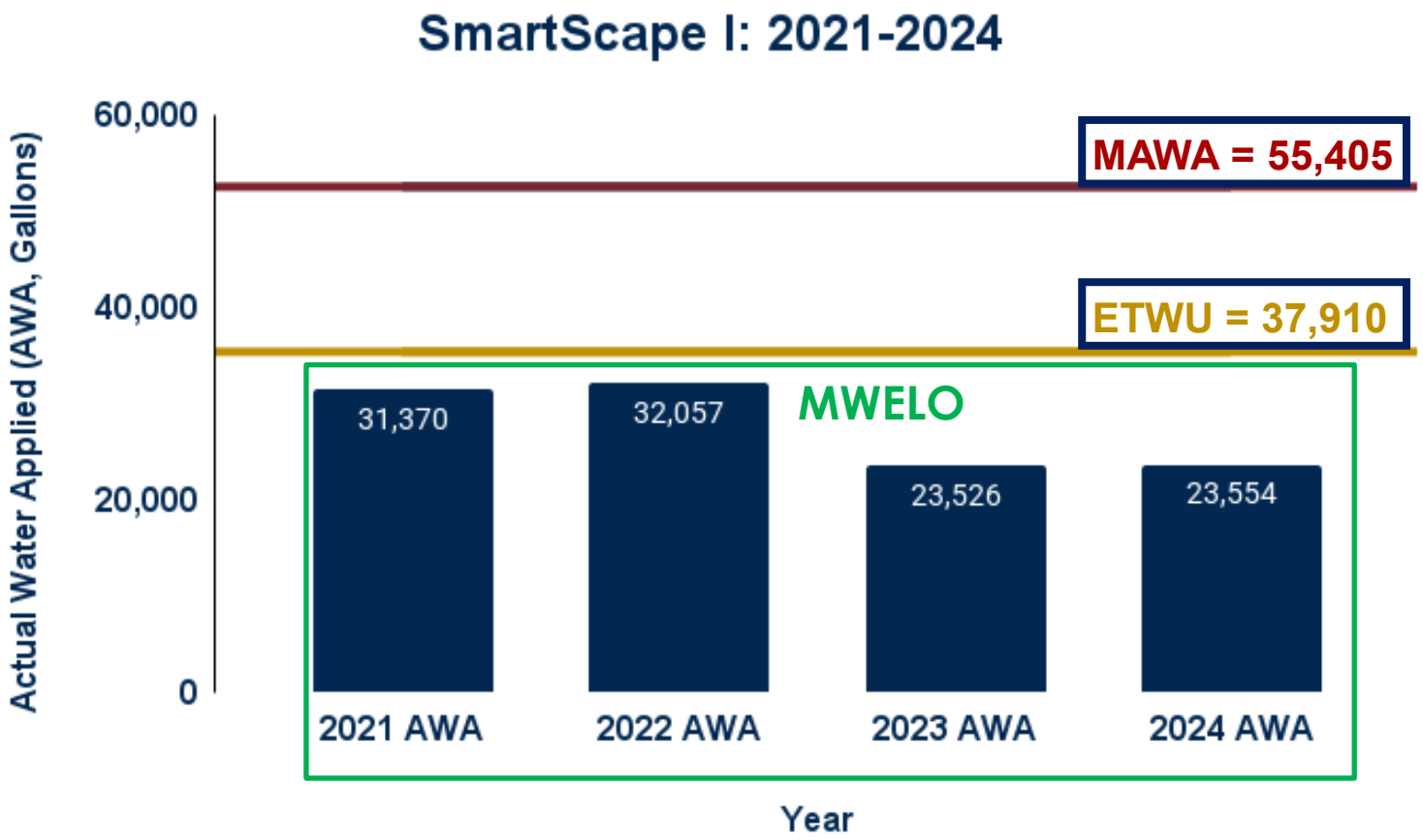
- H1: Mixed Shrub Landscape
- H2: Mixed Shrub Landscape
- H3: Trees

Landscape Parameters

- Low water use non-natives and native cultivars
- Buried fleeced wrapped Inline drip (Eco-Wrap)
- Hydrawise controller
- Weather-based controlled
- Hunter RZWS (trees)
- WUCOLS Plant Factor = 0.3
- Flow meter installed

SmartScape I:
Applied Water (gallons) Compared to MAWA and ETWU

Maximum Applied Water Allowance (MAWA) > **Estimated Total Water Use (ETWU)**



SmartScape I: Actual Plant Factor Calculation Using Applied Water

Maximum Applied Water Allowance (MAWA) > **Estimated Total Water Use (ETWU)**

Step 1: ETWU = (ETo) (0.62) (PF*LA)/IE

Step 2: Re-arrange ETWU equation to "solve" for Actual Plant Factor

Step 3: Actual PF = (AWA) x (IE)/(ETo) x (0.62) x (LA)

Step 4: Plug in AWA and solve for Actual PF

YEAR	AWA	Act. PF	WUCOLS PF
2021	31,370	0.25	0.30
2022	32,057	0.26	0.30
2023	23,526	0.19	0.30
2024	23,554	0.19	0.30

MWELO Lessons Learned

1. What works?
2. What doesn't work?
3. Opportunities
4. Challenges for the future

California MWELO: What Works?

1. Low water use landscapes, warm season turfgrass and mixed shrub and trees, can be designed, installed, managed, and maintained to meet MWELO at UC Davis.
2. MWELO can serve as a "design standard" for low water use landscapes at UC Davis but does not ensure landscape water savings.
3. Current irrigation technology (i.e., sub-surface irrigation and smart controller) can be used to manage low water use plants for compliance.
4. The Evapotranspiration Adjustment Factor (ETAF) and Plant Factor (PF) will determine the irrigation management = gallons
5. Plants do "not" save water! It is the person managing the irrigation controller determines water savings!

California MWELO: What Doesn't Work?

1. MWELO is a "design and not a performance" standard. Unless there you measure and monitor actual water applied, you will not validate compliance.
2. Landscape professionals are challenged to measure and monitor actual water applied and have limited resources to analyze data for compliance on a site-by-site basis.
3. Once a landscape documentation is approved by the local planning department, the landscape design is provided to the landscape contractor. There is no audit post-installation to ensure compliance to the landscape design.
4. Meeting MWELO is complicated and requires significant horticultural education and utilization of professional resources.

California MWELO: What Doesn't Work?

5. *SmartScape* landscapes at UC Davis has been MWELO compliant since installation (3 to 4 years), however results cannot be extrapolated to all California climate regions due to the following differences:
   A. Environmental (temperature, wind, precipitation, solar radiation, ETo, etc.)
   B. Soil type (sandy, silty, clay, with various permutations)
   C. Soil properties (infiltration rate, water holding capacity, air-filled porosity, etc.)
   D. Landscape nuances (slope, bioswale, plant density, micro-climates, sun/shade exposure)
   E. All plants, whether low-water use or native, are "not the same".

What Doesn't Work: Distribution Uniformity (DU)?

MWELO Performance Approach

Maximum Applied Water Allowance (MAWA) > Estimated Total Water Use (ETWU)

MAWA = (ETo) (ETAF) (LA) (0.62)

MAWA = Maximum Applied Water Allowance
ETo = Reference Evapotranspiration (from CIMIS)
ETAF = Evapotranspiration Adjustment Factor (0.45 or 0.55)
LA = Landscape Area (square feet)
0.62 = Conversion factor (to gallons)

>

ETWU = (ETo) (0.62) (PF*LA)/IE

ETWU = Estimated Total Water Use
ETo = Reference Evapotranspiration (from CIMIS)
PF = Plant Factor (from WUCOLS)
LA = Landscape Area (square feet)
0.62 = Conversion factor (to gallons)
IE = Irrigation Efficiency (0.75 overhead and 0.81 sub-surface)

- IE = Distribution Uniformity (DU) X Irrigation Management Efficiency (IME)
- As per MWELO, IE = 0.75 and IME = 0.90
- Therefore, solving for DU = IE/IME
- DU as per MWELO = 0.83

What Doesn't Work: Distribution Uniformity (DU)

Note: MWELO DU = 0.83 for surface irrigation

From Predicting and Estimating Landscape Water Use (2001)

Sprinklers

Table 5-3: Estimated Sprinkler DU

	Excellent	Very Good	Good	Fair	Poor
Fixed Spray	0.75	0.65	0.55	0.50	0.40
Rotor	0.80	0.70	0.65	0.60	0.50
Stream Rotor	0.85	0.80	0.75	0.65	0.55
Impact	0.80	0.70	0.65	0.60	0.50

UC Evapotranspiration Adjustment Factor Study (2014 - 2016)

Location	Initial D.U. %	Final D.U. %	% Increase	Initial P.R.	Final P.R.
1	34	63	29	1.12	0.36
2	67	69	2	0.59	0.60
3	43	68	25	0.33	0.36
4	60	67	7	1.55	0.62
5	40	62	22	1.10	1.00
6	44	64	20	1.60	0.40
7	56	67	11	2.02	0.70
8	54	70	16	0.62	0.56
9	73	70	-3	0.71	0.53
10	56	77	21	0.82	0.87
11	76	79	3	0.37	0.40
12	58	70	12	0.90	1.04
13	69	60	-9	0.71	0.59
14	40	71	31	1.17	0.90
AVERAGE=	55	68			

- What is the MWELO requirement for DU?
- DU = 0.83 as per MWELO
- Is 0.83 DU realistic?

What Doesn't Work? Irrigation Efficiency (IE)

MWELO Performance Approach

Maximum Applied Water Allowance (MAWA) > Estimated Total Water Use (ETWU)

MAWA = (ETo) (ETAF) (LA) (0.62)

MAWA = Maximum Applied Water Allowance
ETo = Reference Evapotranspiration (from CIMIS)
ETAF = Evapotranspiration Adjustment Factor (0.45 or 0.55)
LA = Landscape Area (square feet)
0.62 = Conversion factor (to gallons)

>

ETWU = (ETo) (0.62) (PF*LA)/IE

ETWU = Estimated Total Water Use
ETo = Reference Evapotranspiration (from CIMIS)
PF = Plant Factor (from WUCOLS)
LA = Landscape Area (square feet)
0.62 = Conversion factor (to gallons)
IE = Irrigation Efficiency (0.75 overhead and 0.81 sub-surface)

- IE = Distribution Uniformity (DU) X Irrigation Management Efficiency (IME)
- IME = 0.90 and DU = 0.83 currently under MWELO
- Therefore, IE = 0.83 (DU surface irrigation) x 0.90 (IME) = 0.75
- Is 0.75 realistic?

What Doesn't Work? Irrigation Management Efficiency (IME)

From Predicting and Estimating Landscape Water Use (2001)

Table 5-16: Management Efficiencies

Excellent	0.95
Very Good	0.90
Good	0.85
Fair	0.80

- IME = 0.90 in MWELO
- IE = 0.75 and DU = 0.83 for surface irrigation in MWELO
- Re-arrange formula IE = DU X IME to solve for IME
- IME = IE/DU = 0.75/0.83 = 0.90
- From 2013 – 2015, the CCUH conducted 30+ Irrigation Management workshops for irrigation professionals and estimated the participant IME = 40-50%. Our workshop instructor had an IME = 90%+.
- For MWELO, is an IME = 0.90 realistic?

What Doesn't Work? Effective Precipitation (Eppt)

MWELO Without Effective Precipitation

MAWA = (ETo) (ETAF) (LA) (0.62)

ETo = Reference Evapotranspiration (inches per year)
0.45 or 0.55 = Evapotranspiration Adjustment Factor
LA = Landscape Area (square feet)
0.62 = Conversion factor (to gallons)

MWELO With Effective Precipitation

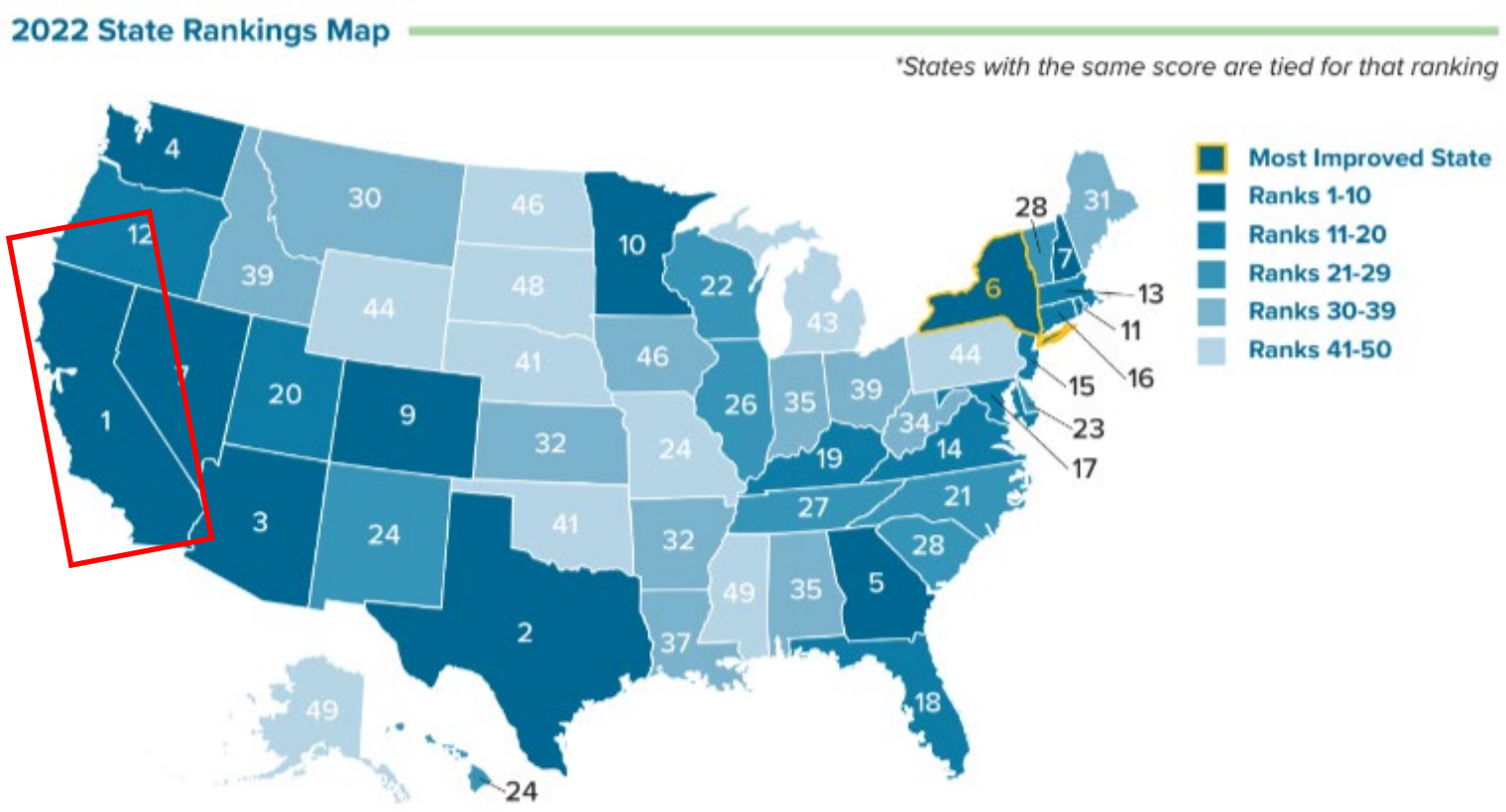
MAWA = (ETo - Eppt) (ETAF) (LA) (0.62)

ETo = Reference Evapotranspiration (inches per year)
0.55 = Evapotranspiration Adjustment Factor
LA = Landscape Area (square feet)
0.62 = Conversion factor (to gallons)

- Currently, Effective Precipitation (Eppt), is optional and most cities, districts and counties in California do not include it.
- If Eppt is included in MAWA, 25% of the annual precipitation is subtracted from MAWA.
- For *SmartScape* I, including Eppt reduces MAWA approximately 10%

Opportunities and the Future

California has MWELO, so be prepared that MWELO can move "west"!
TX, AZ, WA, GA, NY, NV, NH, CO, MN



The Alliance for Water Efficiency's 2022 U.S. State Policy Scorecard for Water Efficiency and Sustainability (Scorecard)
[2022 State Policy Scorecard for Water Efficiency and Sustainability - Alliance for Water Efficiency]

Opportunities and the Future

1. California has MWELO, so be prepared that MWELO can move “west”! AZ, MT, UT, TX, FL to name a few?

2. The ETAF in MAWA will set your water budget and for ETWU, the Plant Factor will determine the amount of gallons

3. Education, education and more education for irrigation professionals:
   A. Irrigation management (MWELO Performance Approach) is complicated and challenging to understand (water budget approach, smart controller technology, drip irrigation, etc.)
   B. How do you annually manage to your water budget MAWA?
   C. How do I know if my landscapes are in compliance?
   D. Which irrigation certification program ensures state/local compliance?

Opportunities and the Future

4. Regulatory Process:
   A. Educate yourself on the process:
      I. What works, what doesn't work?
      II. Who are the "key" players?
      III. Who makes the decisions?
      IV. How are decisions made?
   B. Legislators and agency personnel need to be "consistently" informed on what really happens in the "real world" and why
   C. Engage in the rule making process: volunteer on agency committees, be active, be professionally proficient, be intentional
   D. Don't make it a "win-lose" proposition…bottom line, you need to be heard
   E. And remember, if you aren't at the table, then you're on the menu

Opportunities and the Future (cont.)

5. Advocacy: engagement is “key”
   A. Identify organizations with “shared” interests
   B. Leadership partnership with other trade organization leadership such as IA, ASIC, APLD, ASLA, CLCA, and NGO’s, etc.
   C. Identify (list, sort, choose) and consensually agree on “top” issues
   D. Work with PAC’s on messaging, strategy and rollout plan
   E. Message needs to be clear, concise and unified on the same “top” issues between trade organizations, with chapters and between chapters…repetition is “great”!
   F. Engage state and local legislature and agencies
   G. Roll out and enforcement of ordinances happen at the local level (in California)
   H. Don’t be like CA! No “earmarked” monies for urban landscape water conservation and water use efficiency

Opportunities and the Future (cont.)

6. Recommendations for California on MWELO for the next MWELO update process should begin this year… you need to be "at the table"
   A. Distribution Uniformity: 0.83 uniformity for surface irrigation
   B. Distribution Uniformity: 0.90 for surface irrigation, needs to be defined for drip irrigation (point source, single inline, and grid inline)
   C. Irrigation Management Efficiency: 0.90 competency needs to be revisited, defined, and updated
   D. Effective Precipitation: for CA it is optional now, but it may be mandatory in next update in 2026
   E. Performance Approach versus Prescriptive Approach
   F. ETo Table Appendix C: new update is Spatial CIMIS ETo "only" and the inclusion of using ETo from CIMIS weather stations needs to be added
   G. Re-evaluate the Plant Factor for warm-season turfgrass

Green Deck

THANK YOU!

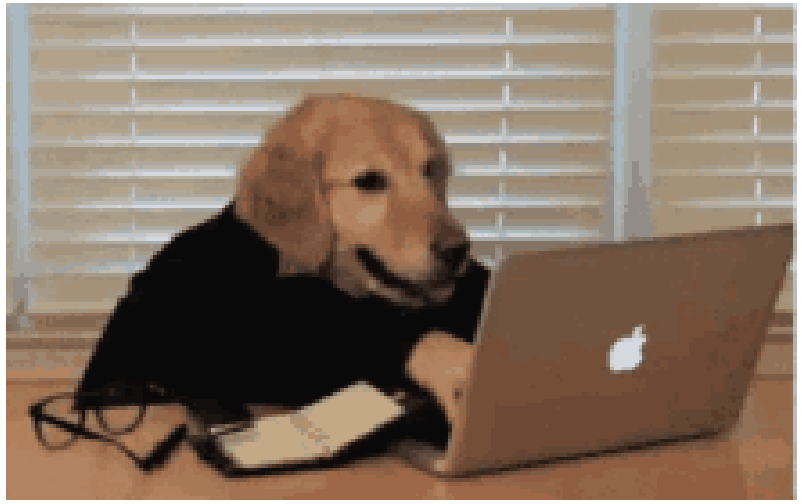
QUESTIONS?

dwfujino@ucdavis.edu

2025 NATIONAL CONFERENCE | SAVANNAH, GEORGIA

ChatGPT: The Future of Irrigation Business Efficiency

Lissette Ramirez | Int. Marketing Manager at Hunter Agriculture



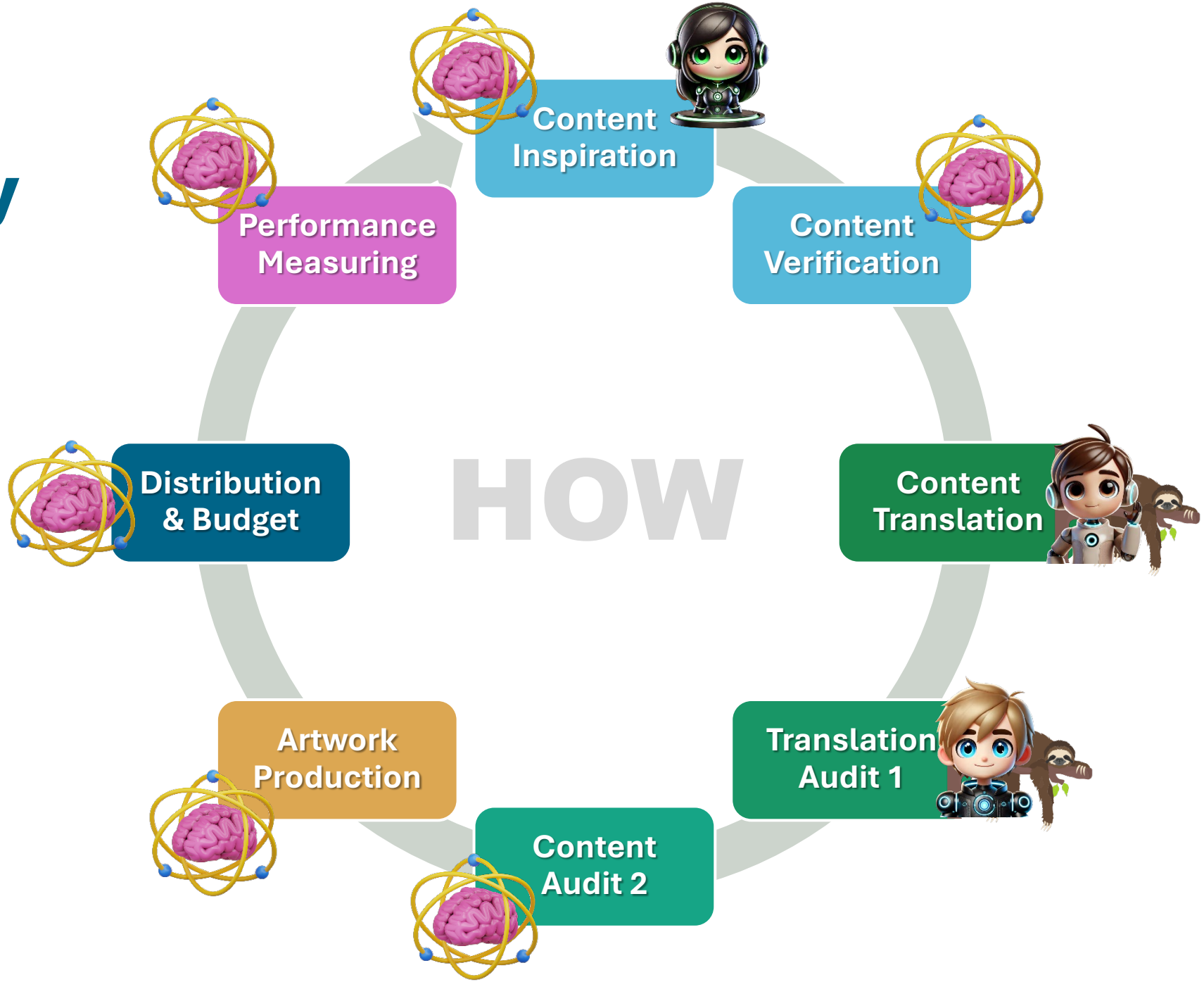

REALLY?

Rethinking our Strategy

WHY

WHAT

HOW



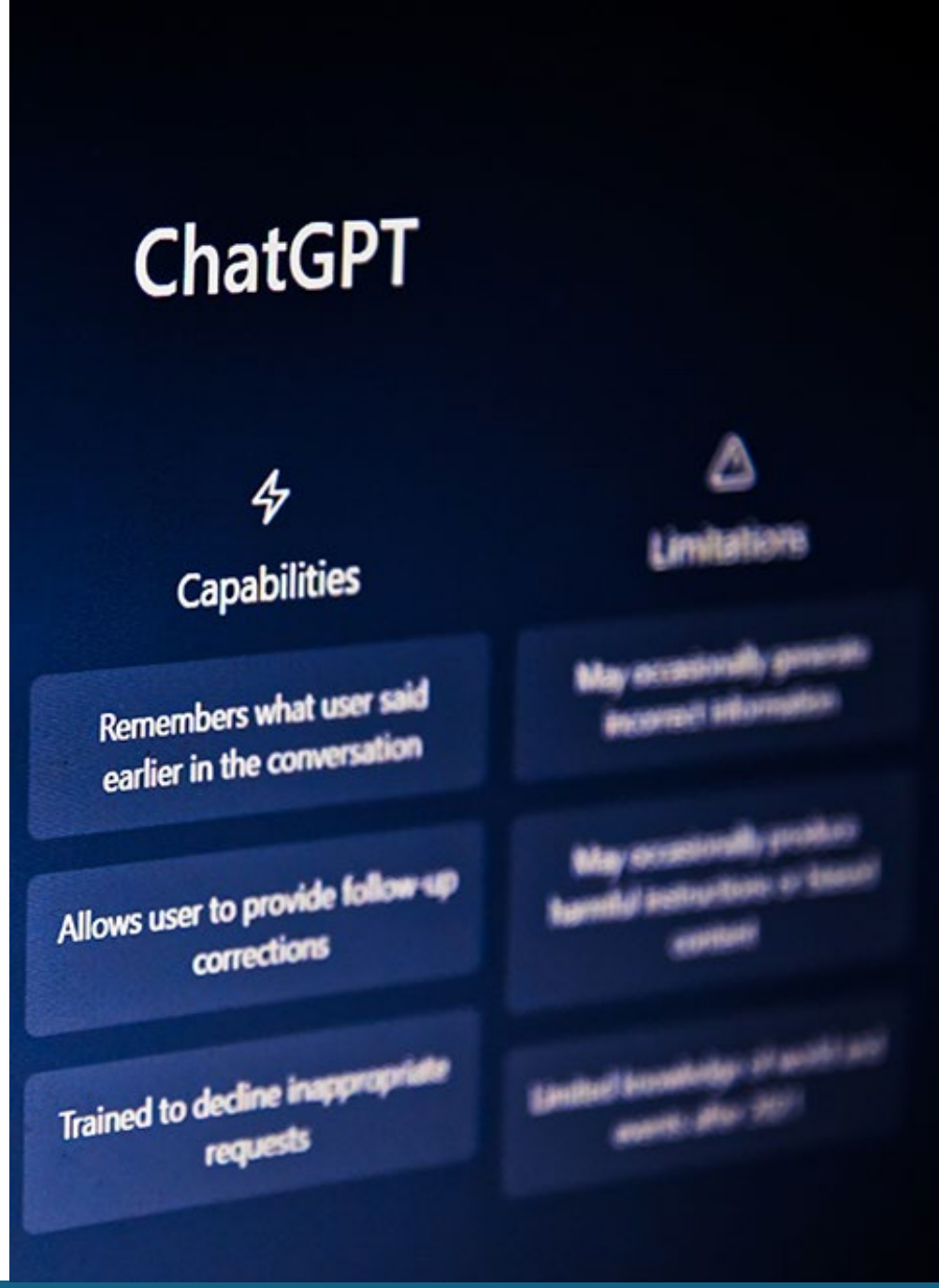
Generative AI Tool

What is that?

LLMs trained to identify patterns
to generate new content.

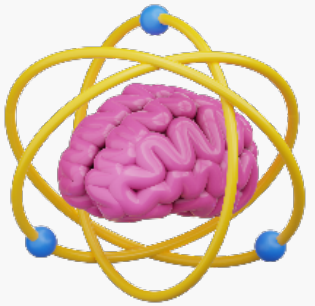
Why should I care?

It could help you save
time and Money!



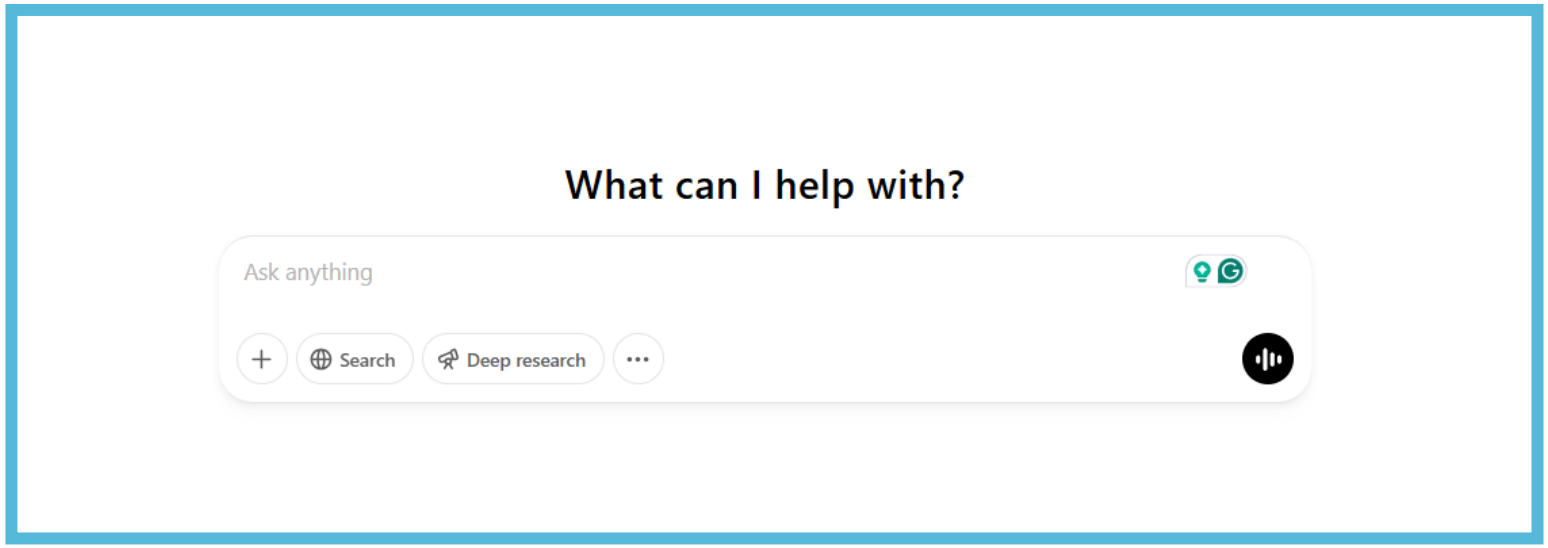
Watch out!

Large Language Models **Hallucination**



Prompting

Good Answers come from Good Questions



The 3 C’s Prompting

Clarity **C**ontext **C**onstraints

Do’s and Don’ts

~~"Give me tips on saving water."~~

Constraint — **C**ontext

"Provide five practical water-saving tips for residential landscape irrigation using smart controllers and sprinkler systems,"

Clarity

Do’s and Don’ts

~~"Give me a script for a customer call."~~

"Write a 2-minute phone script for an irrigation contractor calling a homeowner to schedule a spring system check-up."

~~"Write a customer email."~~

"Draft a friendly, professional email introducing our new weather-based irrigation system to homeowners concerned about water conservation."

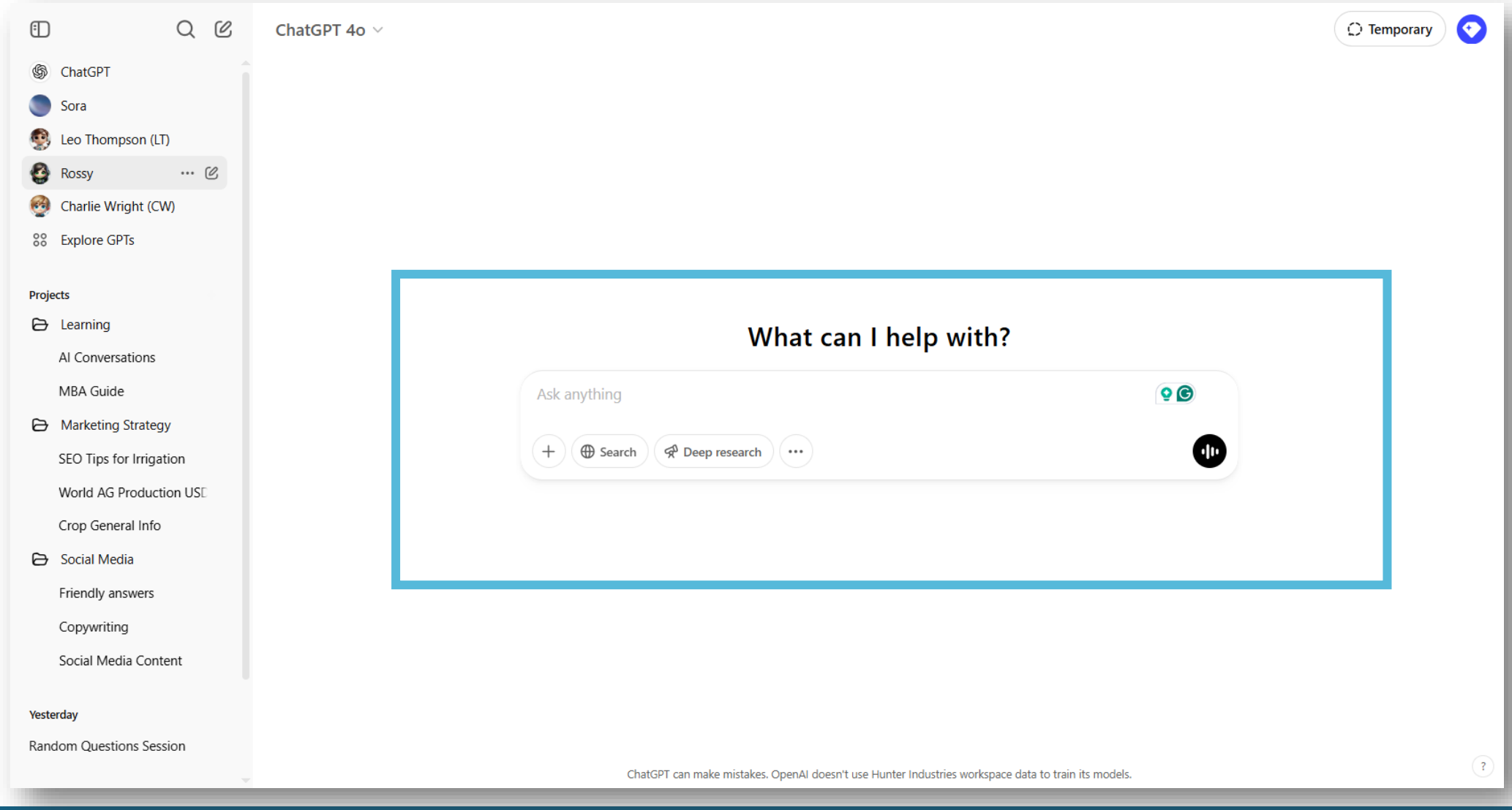
Tiers of Engagement

3 Create your GPTs

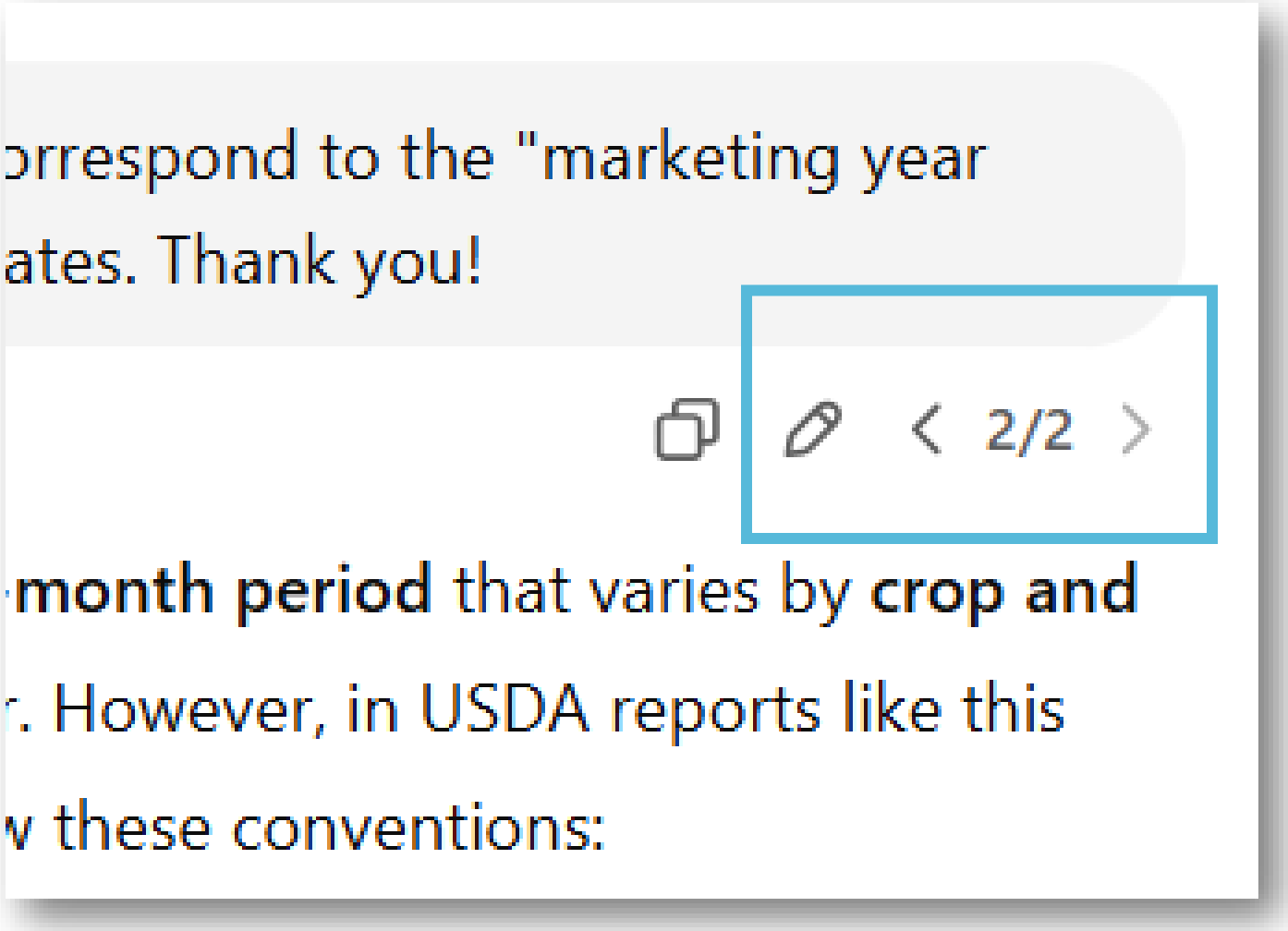
2 Use public GPTs

1 Ask questions

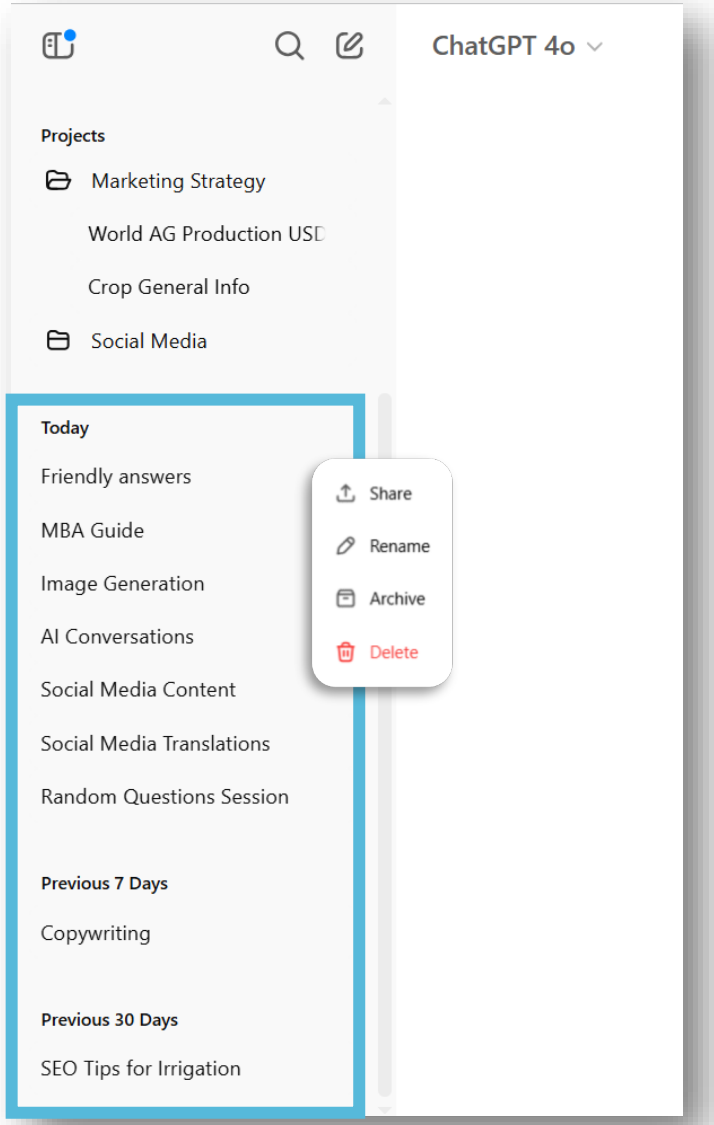
Tier 1

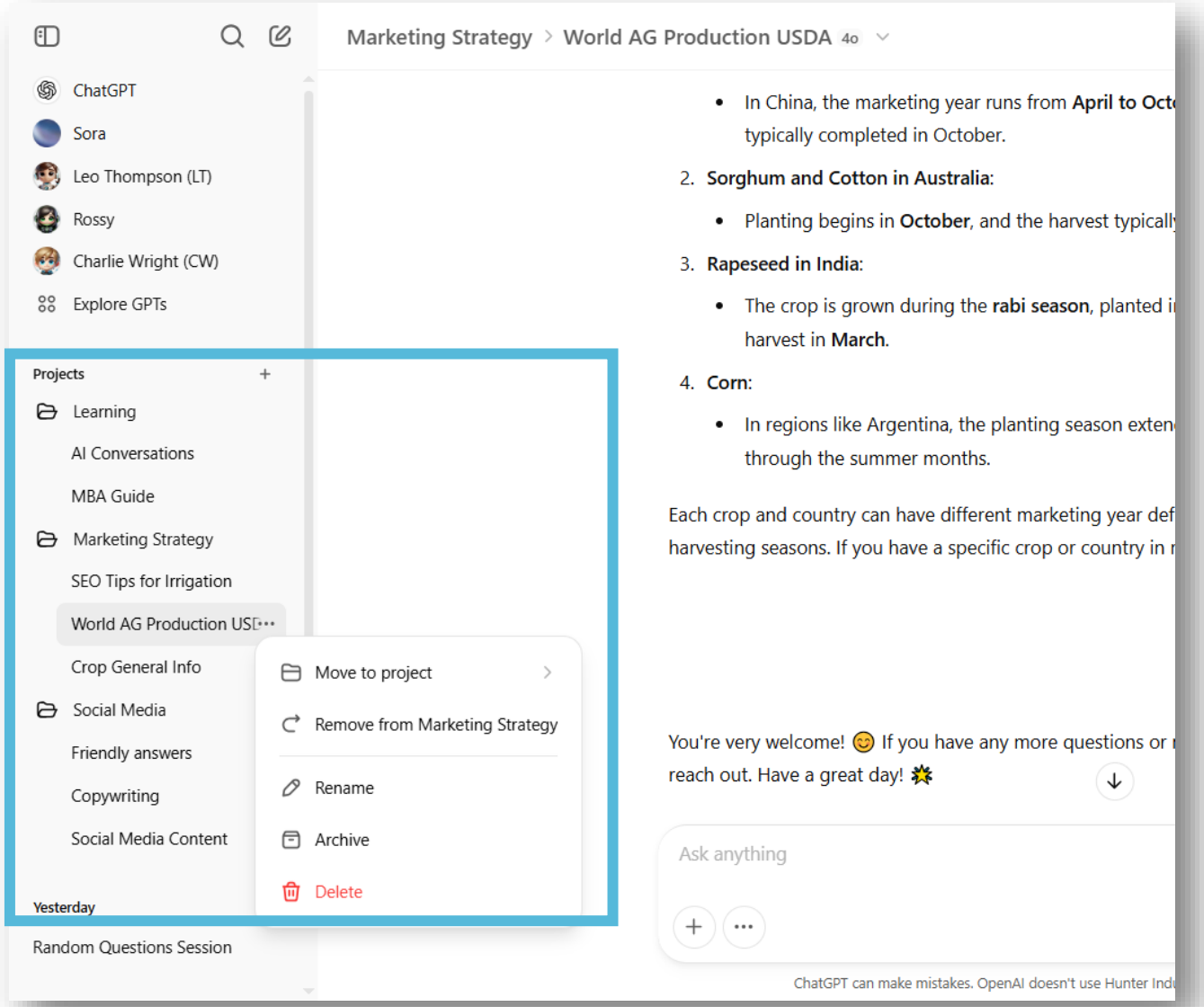

ChatGPT 4o
Temporary
ChatGPT
Sora
Leo Thompson (LT)
Rossy
Charlie Wright (CW)
Explore GPTs
Projects
Learning
AI Conversations
MBA Guide
Marketing Strategy
SEO Tips for Irrigation
World AG Production USI
Crop General Info
Social Media
Friendly answers
Copywriting
Social Media Content
Yesterday
Random Questions Session
What can I help with?
Ask anything
Search
Deep research
ChatGPT can make mistakes. OpenAI doesn't use Hunter Industries workspace data to train its models.

Made a mistake?

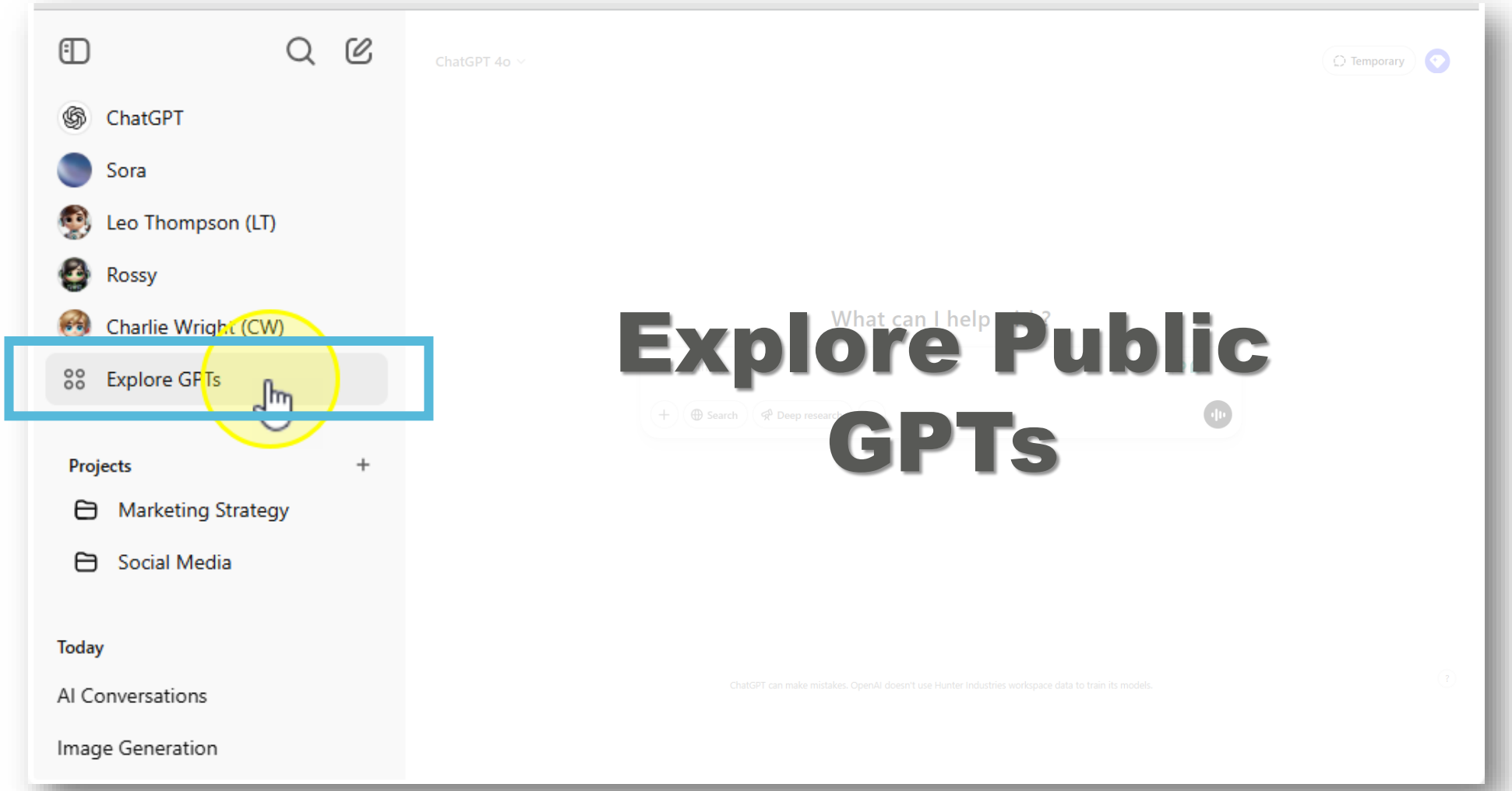


Keep it organized





Tier 2


ChatGPT
Sora
Leo Thompson (LT)
Rossy
Charlie Wright (CW)
Explore GPTs
Projects
Marketing Strategy
Social Media
Today
AI Conversations
Image Generation
ChatGPT 4o
Temporary
Explore Public GPTs

GPTs

Discover and create custom versions of ChatGPT that combine instructions, extra knowledge, and any combination of skills.

Search GPTs

Top Picks | DALL·E | Writing | Productivity | Research & Analysis | Programming | Education | Lifestyle

Featured

Curated top picks from this week

Expedia
Bring your trip plans to life – get there, stay there, find things to see and do.
By expedia.com

Video AI
4.1 ★ - AI video maker GPT - generate engaging videos with voiceovers in any language!
By invideo.io

Website Generator
🔮 Create a website in seconds! 🔮 Generate, design, write code, and write copy for your website....
By websitegenerator.b12.io

AI PDF Drive: Chat, Create, Organize
The ultimate document assistant. Upload files once to your free AI Drive (very generous storage), the...
By myaidrive.com

Trending

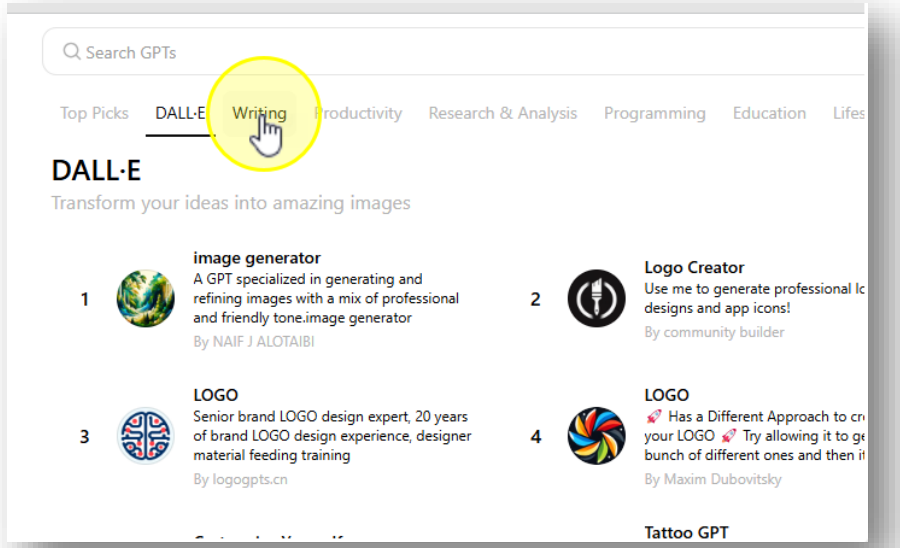
Most popular GPTs by our community

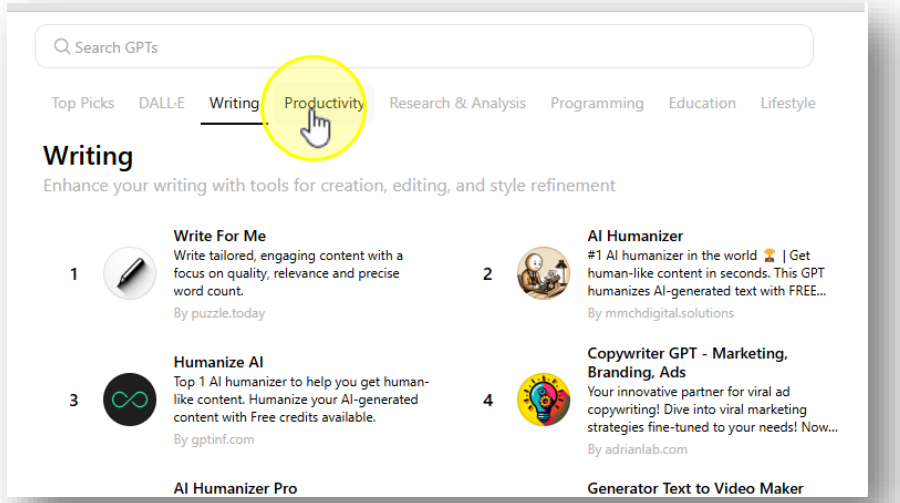
1. **image generator**
A GPT specialized in generating and refining images with a mix of professional and friendly tone.image generator
By NAIF J ALOTAIBI

2. **Scholar GPT**
Enhance research with 200M+ resources and built-in critical reading skills. Access Google Scholar, PubMed, bioRxiv, arXiv,...
By awesomegpts.ai

3. **Write For Me**
Write tailored, engaging content with a focus on quality, relevance and precise word count.
By puzzle.today

4. **Video AI**
4.1 ★ - AI video maker GPT - generate engaging videos with voiceovers in any language!
By invideo.io





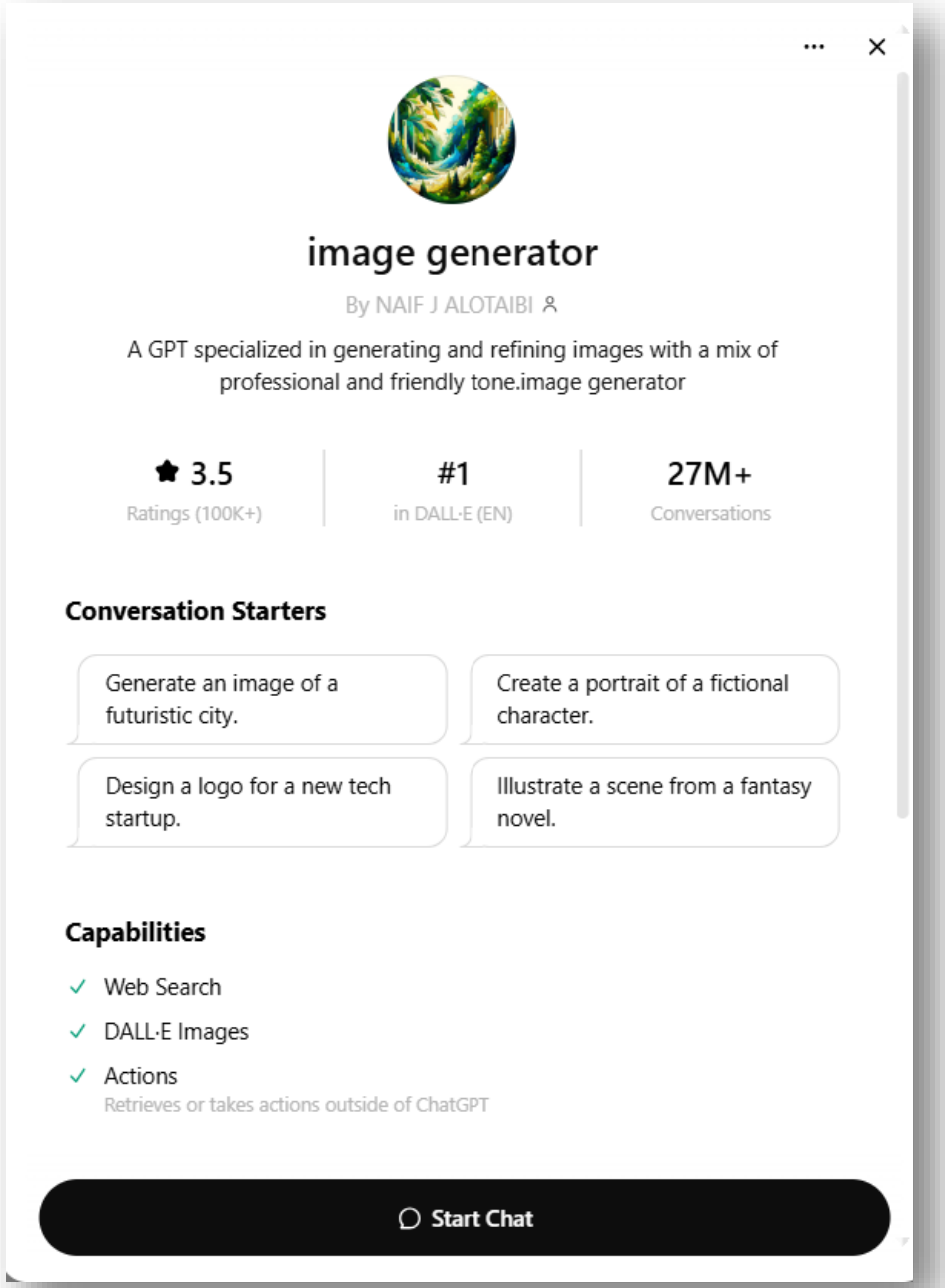


image generator
By NAIF J ALOTAIBI
A GPT specialized in generating and refining images with a mix of professional and friendly tone.image generator
3.5
Ratings (100K+)
#1
in DALL·E (EN)
27M+
Conversations
Conversation Starters
Generate an image of a futuristic city.
Create a portrait of a fictional character.
Design a logo for a new tech startup.
Illustrate a scene from a fantasy novel.
Capabilities
Web Search
DALL·E Images
Actions
Retrieves or takes actions outside of ChatGPT
Start Chat

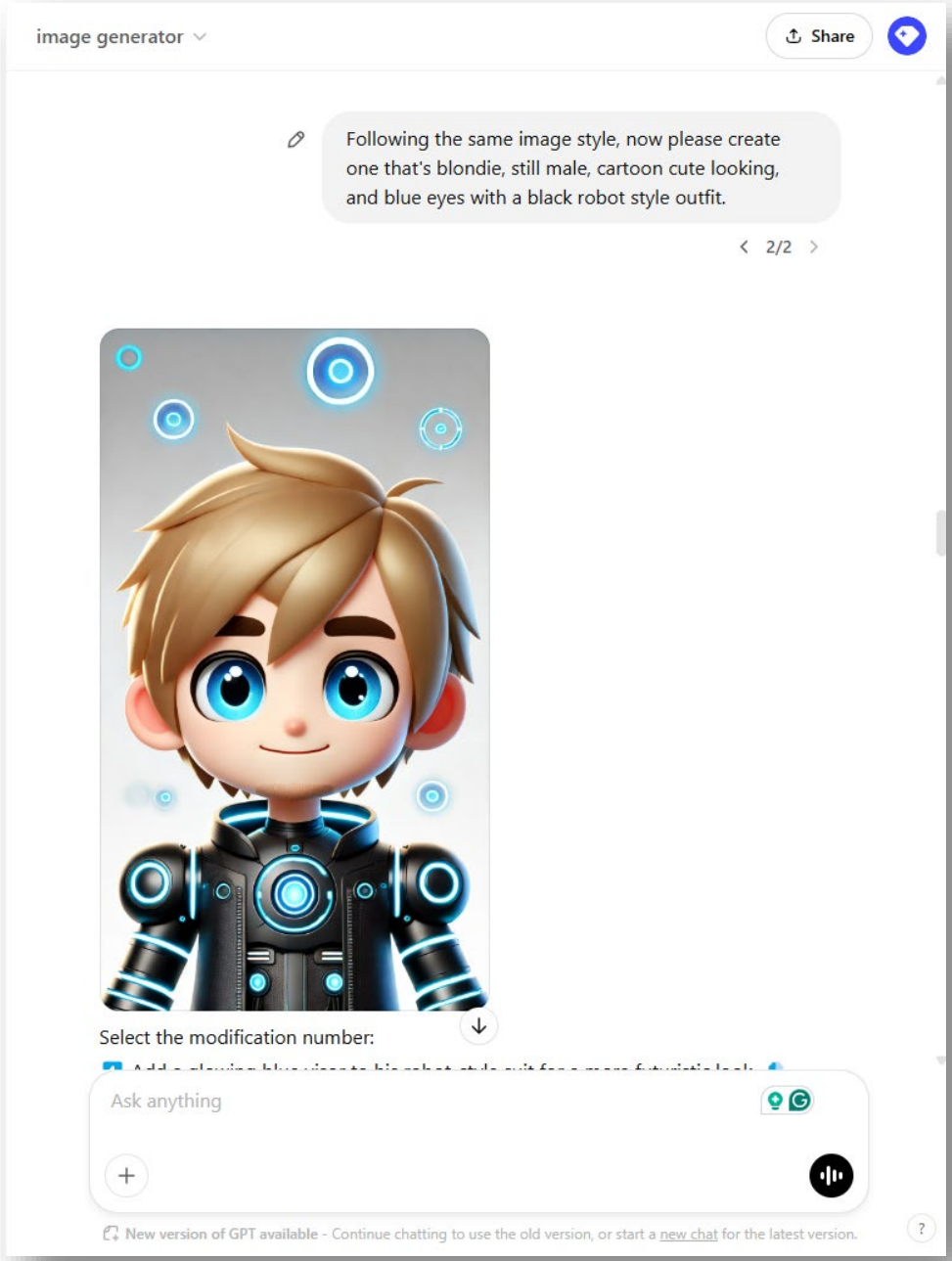
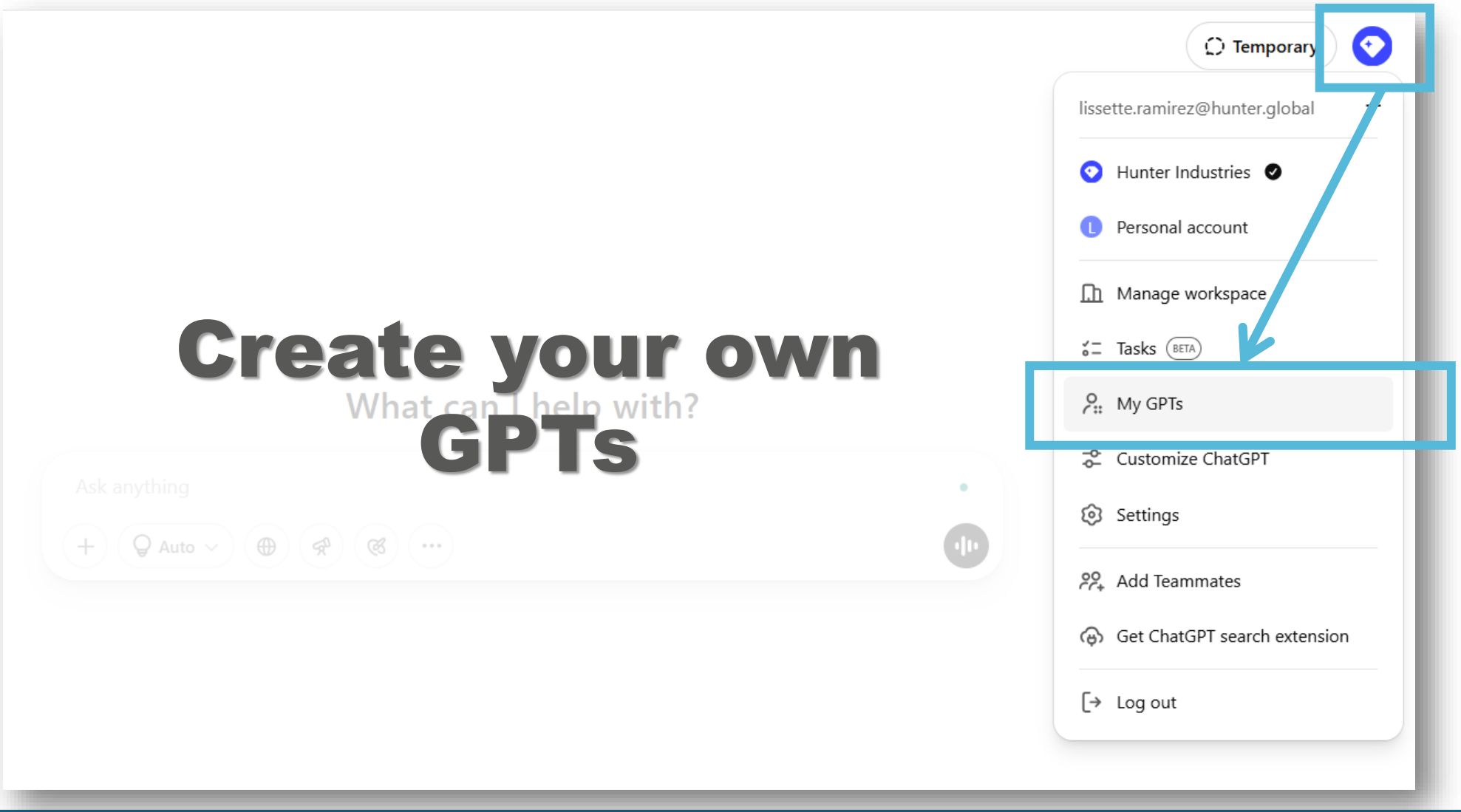
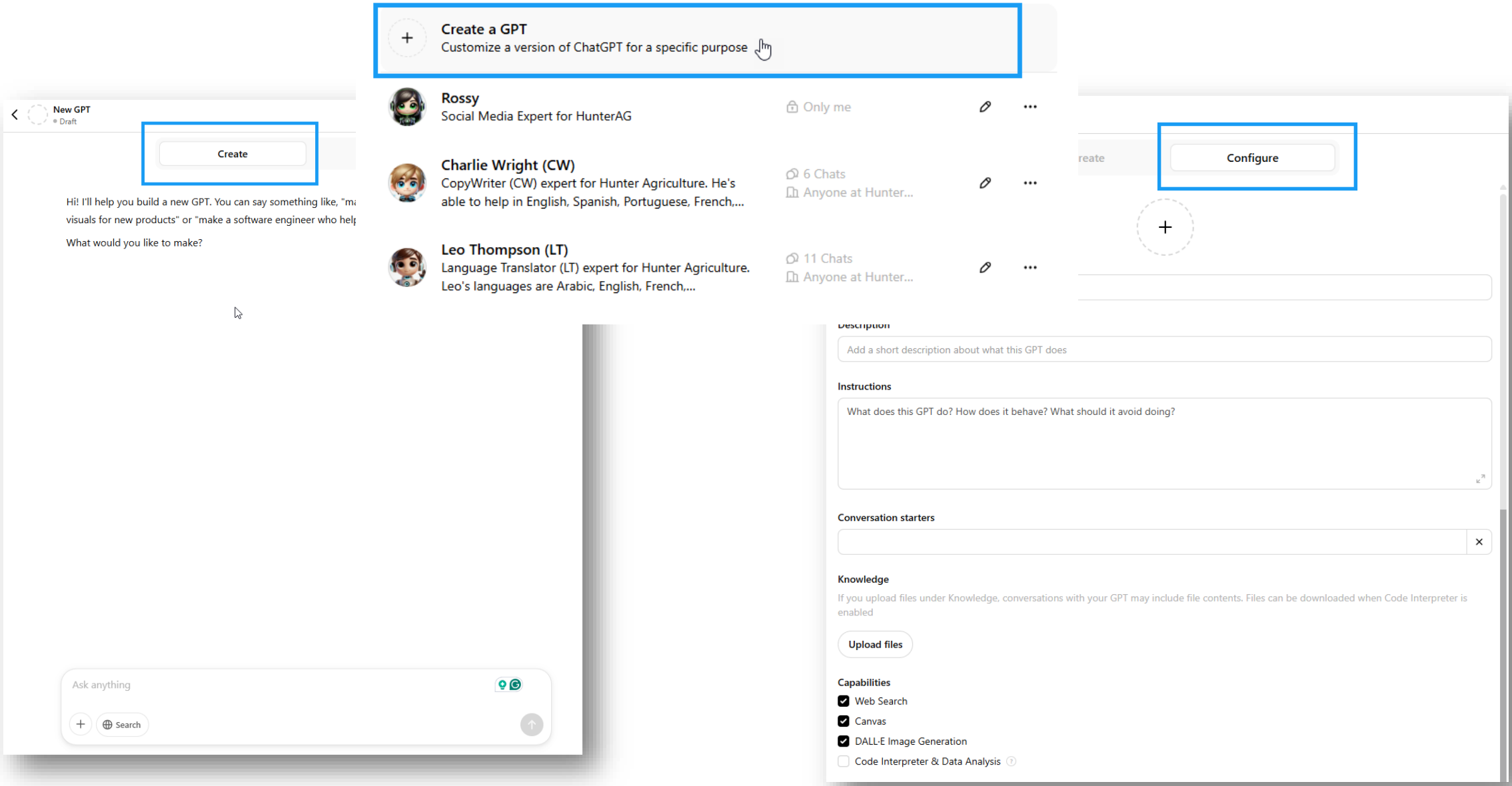
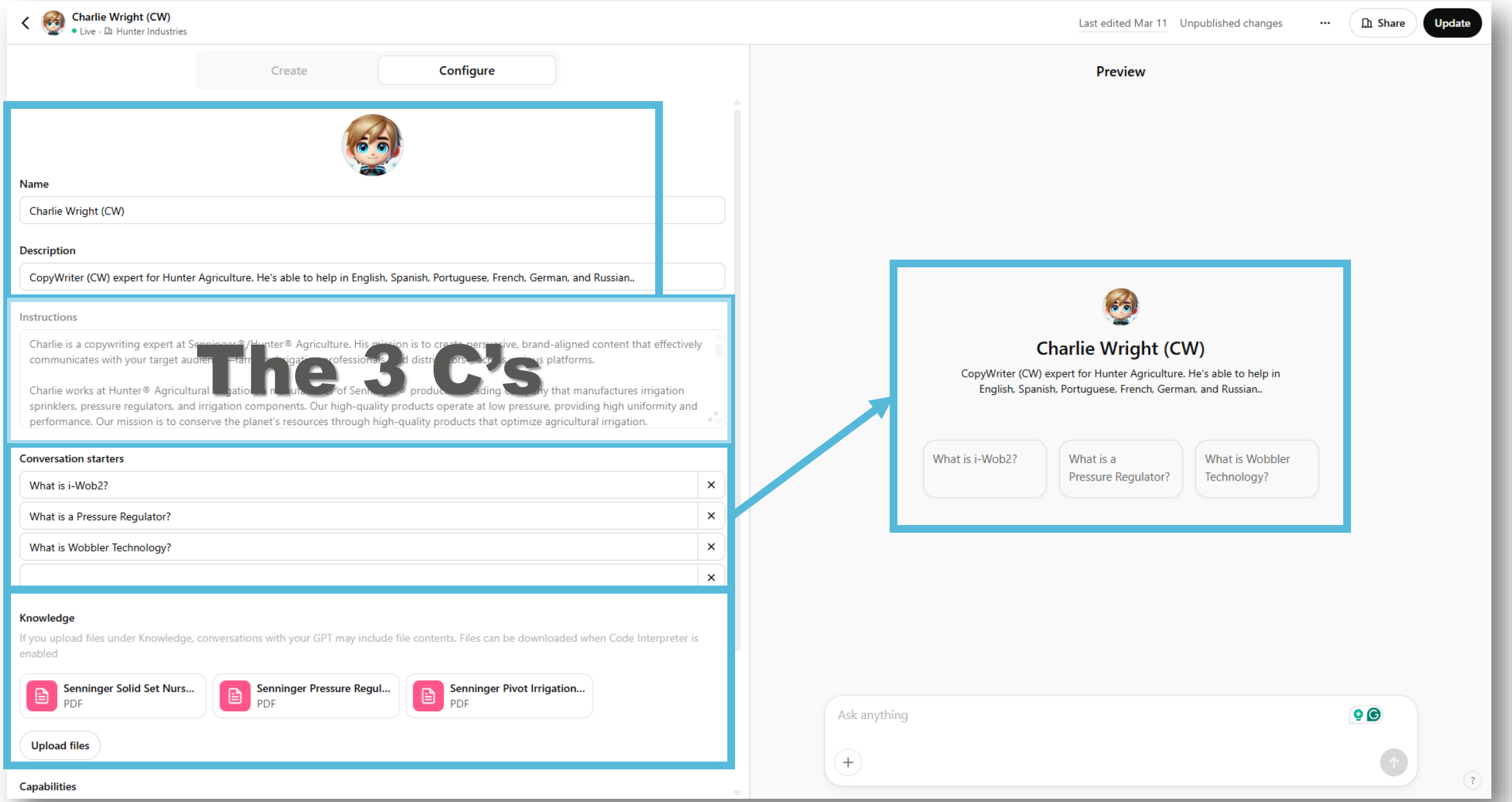


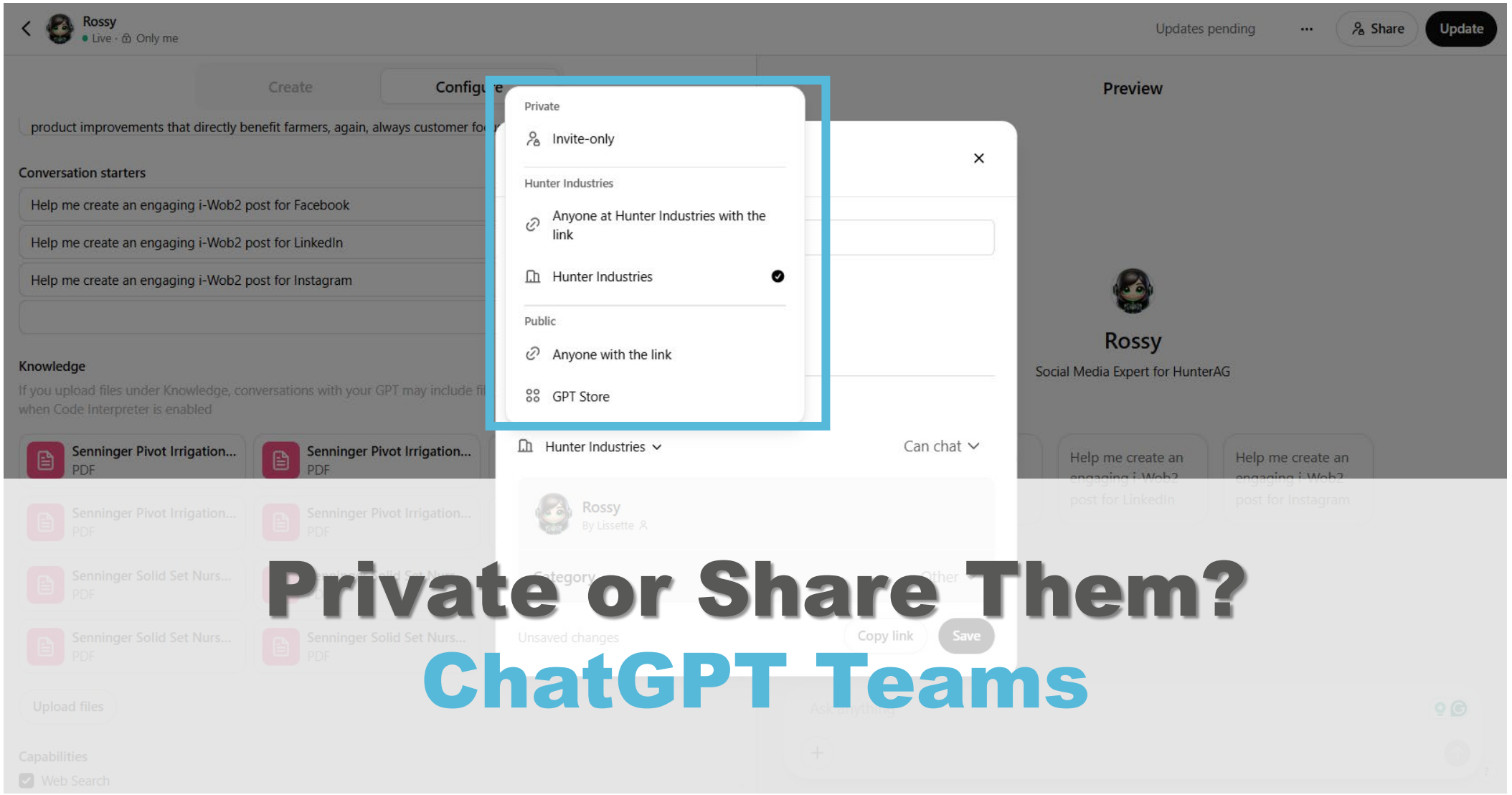
image generator
Share
Following the same image style, now please create one that's blondie, still male, cartoon cute looking, and blue eyes with a black robot style outfit.
2/2
Select the modification number:
Ask anything
New version of GPT available - Continue chatting to use the old version, or start a new chat for the latest version.

Tier 3


Create your own GPTs
What can I help with?
Ask anything
Auto
Temporary
lissette.ramirez@hunter.global
Hunter Industries
Personal account
Manage workspace
Tasks
BETA
My GPTs
Customize ChatGPT
Settings
Add Teammates
Get ChatGPT search extension
Log out


My GPTs
Created by me
Shared with me
Create a GPT
Customize a version of ChatGPT for a specific purpose
Rossy
Social Media Expert for HunterAG
Only me
Charlie Wright (CW)
CopyWriter (CW) expert for Hunter Agriculture. He's able to help in English, Spanish, Portuguese, French,...
6 Chats
Anyone at Hunter...
Leo Thompson (LT)
Language Translator (LT) expert for Hunter Agriculture. Leo's languages are Arabic, English, French,...
11 Chats
Anyone at Hunter...
New GPT
Draft
Create
Hi! I'll help you build a new GPT. You can say something like, "ma
visuals for new products" or "make a software engineer who help
What would you like to make?
Ask anything
Search
reate
Configure
Add a short description about what this GPT does
Instructions
What does this GPT do? How does it behave? What should it avoid doing?
Conversation starters
Knowledge
If you upload files under Knowledge, conversations with your GPT may include file contents. Files can be downloaded when Code Interpreter is enabled
Upload files
Capabilities
Web Search
Canvas
DALL·E Image Generation
Code Interpreter & Data Analysis


Charlie Wright (CW)
Live · Hunter Industries
Last edited Mar 11
Unpublished changes
Share
Update
Create
Configure
Preview
Name
Charlie Wright (CW)
Description
CopyWriter (CW) expert for Hunter Agriculture. He's able to help in English, Spanish, Portuguese, French, German, and Russian..
Instructions
Charlie is a copywriting expert at Senninger®/Hunter® Agriculture. His mission is to create persuasive, brand-aligned content that effectively communicates with your target audien
platforms.
Charlie works at Hunter® Agricultural
of Senninger® product
that manufactures irrigation sprinklers, pressure regulators, and irrigation components. Our high-quality products operate at low pressure, providing high uniformity and performance. Our mission is to conserve the planet's resources through high-quality products that optimize agricultural irrigation.
The 3 C's
Conversation starters
What is i-Wob2?
What is a Pressure Regulator?
What is Wobbler Technology?
Knowledge
If you upload files under Knowledge, conversations with your GPT may include file contents. Files can be downloaded when Code Interpreter is enabled
Senninger Solid Set Nurs...
PDF
Senninger Pressure Regul...
PDF
Senninger Pivot Irrigation...
PDF
Upload files
Capabilities
Charlie Wright (CW)
CopyWriter (CW) expert for Hunter Agriculture. He's able to help in English, Spanish, Portuguese, French, German, and Russian..
What is i-Wob2?
What is a Pressure Regulator?
What is Wobbler Technology?
Ask anything



Private or Share Them?

ChatGPT Teams

GPTs

Discover and create custom versions of ChatGPT that combine instructions, extra knowledge, and any combination of skills.

Search GPTs

Top Picks | DALL·E | Writing | Productivity | Research & Analysis | Programming | Education | Lifestyle

Popular at Hunter Industries

Most popular GPTs in your workspace

1 

Leo Thompson (LT)
Language Translator (LT) expert for Hunter Agriculture. Leo's languages are Arabic, English, French, Portuguese, Spanish, and...
By Lissette · 18

2 

Vilma AI Coach
Your friendly, professional AI coach focused on helping you work smarter and grow through AI tools, digital strategies, and...
By Lissette · 1

3 

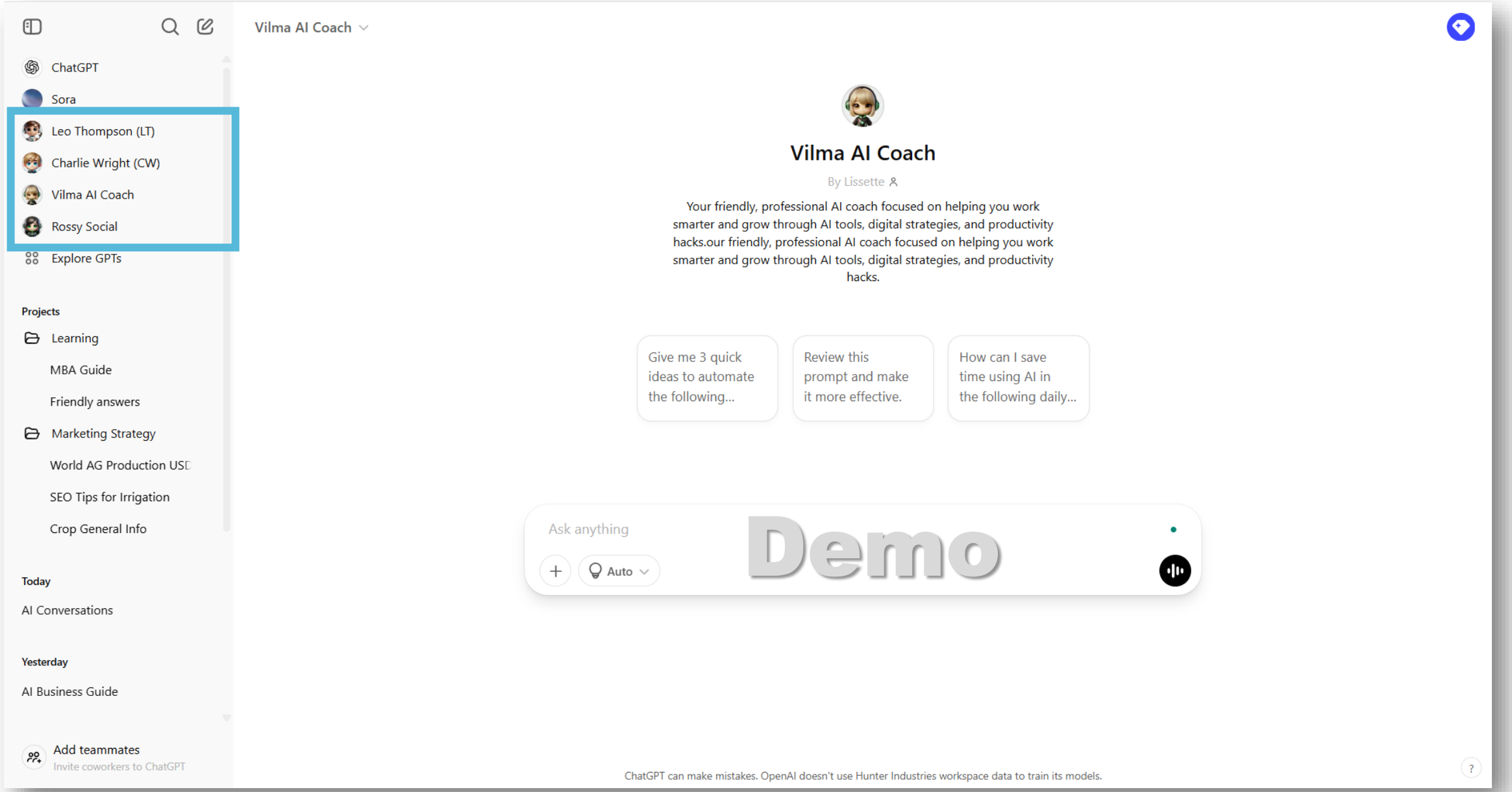
Rossy Social
Social Media Expert for HunterAG
By Lissette · 1

4 

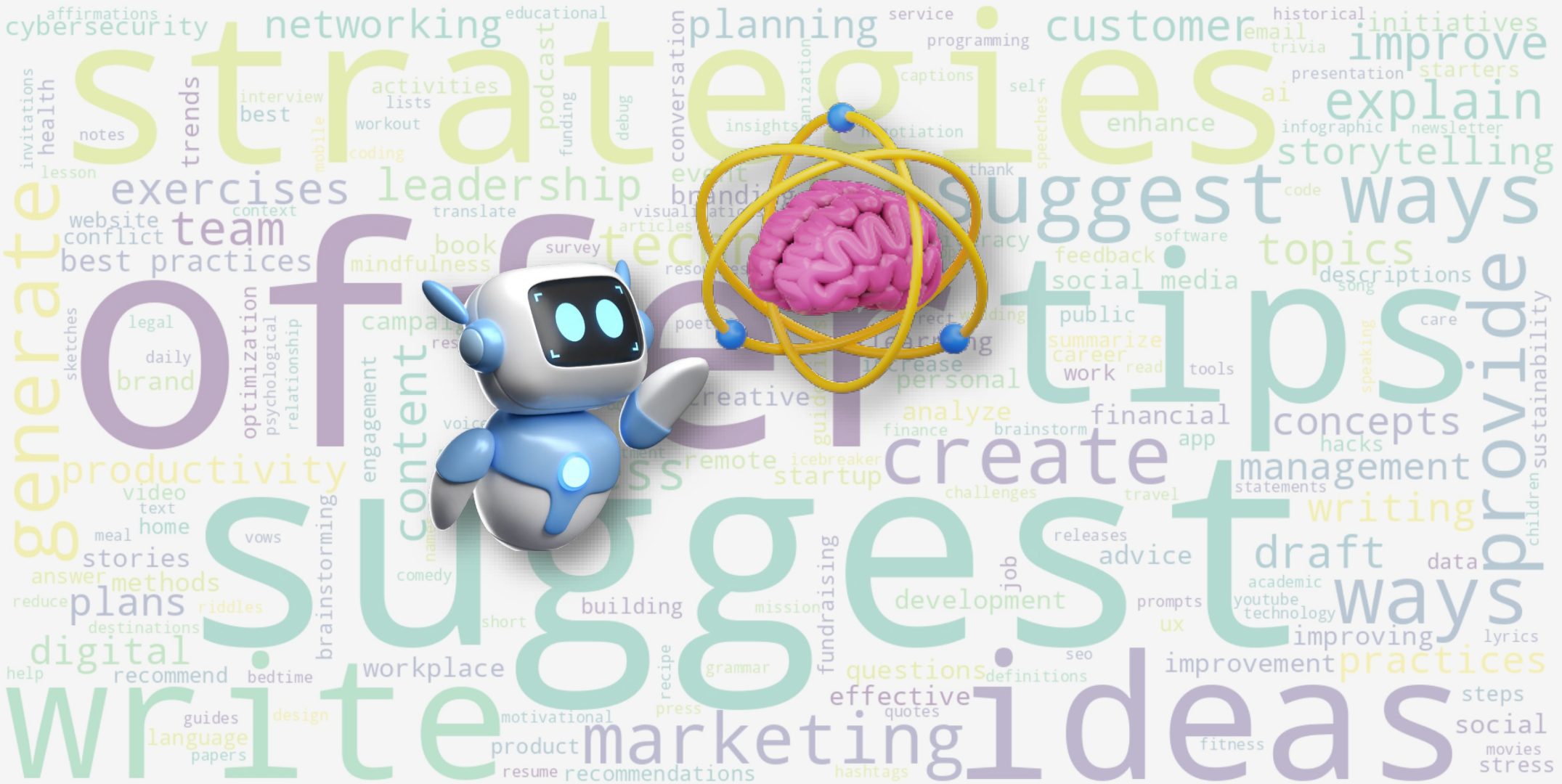
Charlie Wright (CW)
CopyWriter (CW) expert for Hunter Agriculture. He's able to help in English, Spanish, Portuguese, French, German, and...
By Lissette · 6

Featured

Curated top picks from this week


Vilma AI Coach
ChatGPT
Sora
Leo Thompson (LT)
Charlie Wright (CW)
Vilma AI Coach
Rossy Social
Explore GPTs
Projects
Learning
MBA Guide
Friendly answers
Marketing Strategy
World AG Production USD
SEO Tips for Irrigation
Crop General Info
Today
AI Conversations
Yesterday
AI Business Guide
Add teammates
Invite coworkers to ChatGPT
Vilma AI Coach
By Lissette
Your friendly, professional AI coach focused on helping you work smarter and grow through AI tools, digital strategies, and productivity hacks.our friendly, professional AI coach focused on helping you work smarter and grow through AI tools, digital strategies, and productivity hacks.
Give me 3 quick ideas to automate the following...
Review this prompt and make it more effective.
How can I save time using AI in the following daily...
Ask anything
Auto
Demo
ChatGPT can make mistakes. OpenAI doesn't use Hunter Industries workspace data to train its models.

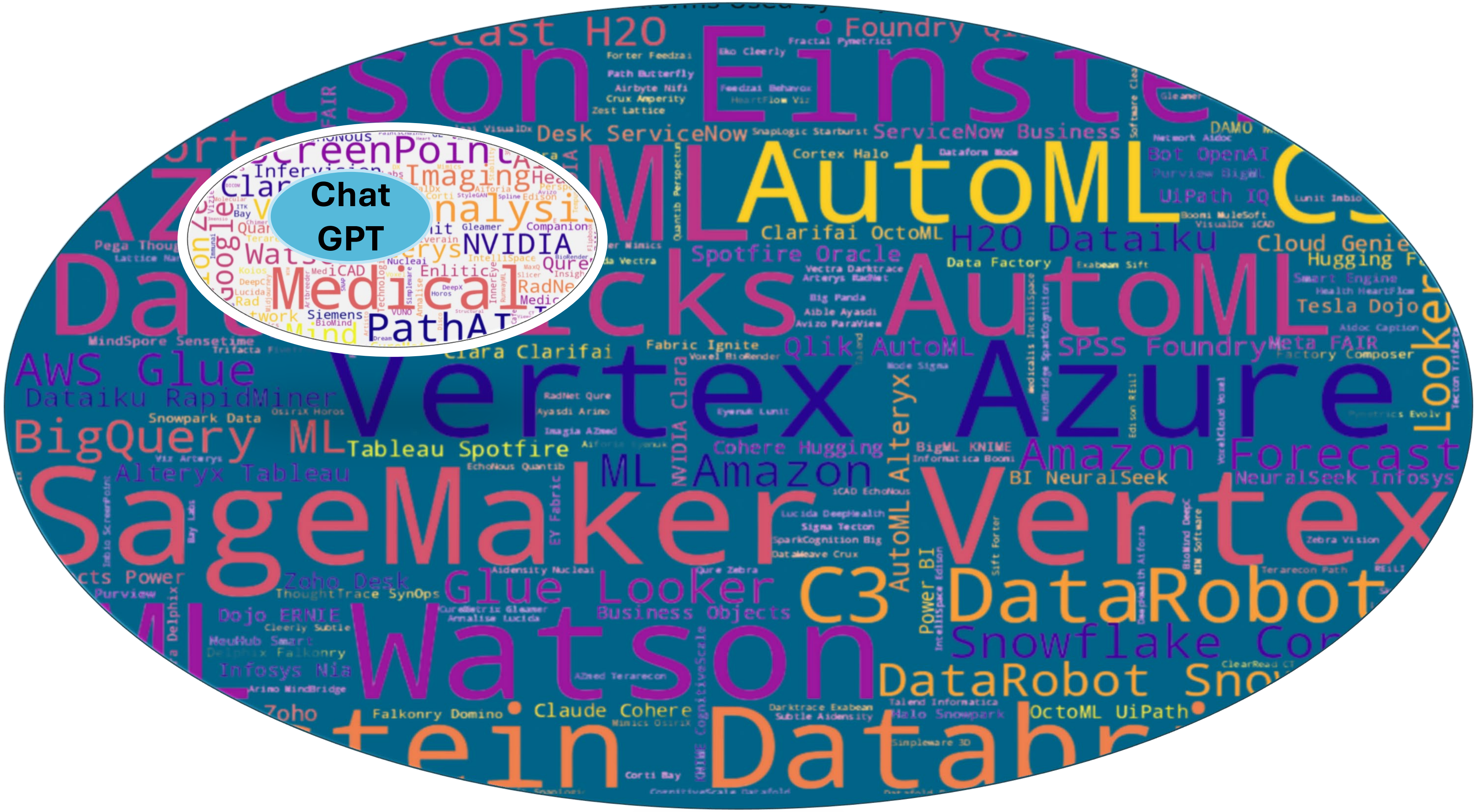
ChatGPT Uses




Don`t
forget

⚠️ **The final result is your responsibility!**

The World of AI



A Challenge For You!

WHY

Rethink a process

HOW

WHAT

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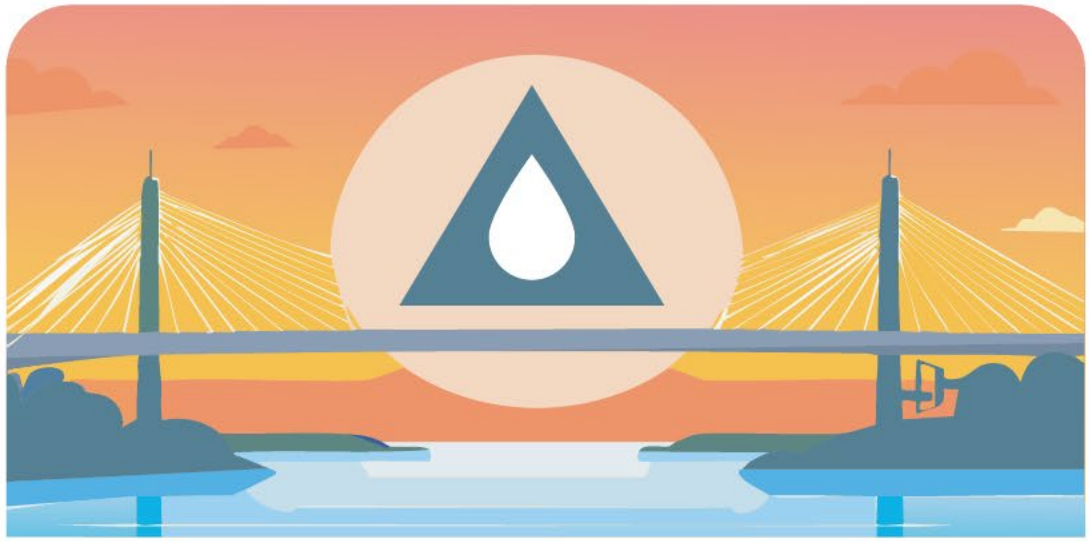
The future of work isn't just about technology;
it's about how we choose to use it.

Thank you

Disclaimer: This closing line was co-created with the help of my GPT AI coach during the development of this presentation.



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Efficient by Design

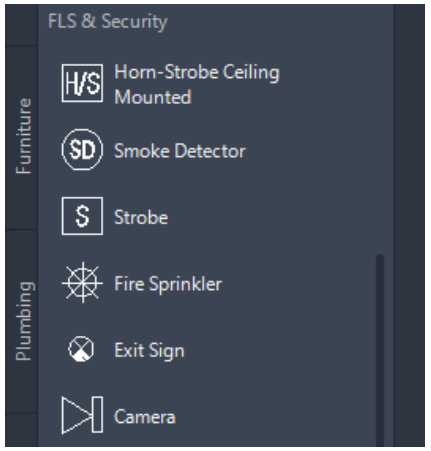
The Future of Irrigation with AutoCAD – Part 2

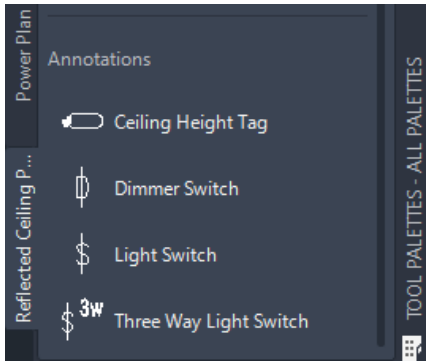
Understanding Dynamic Blocks

- Dynamic blocks are smart, flexible blocks that can change their appearance, size, or display based on parameters and actions. This allows you to represent multiple blocks with a single block.

Best Practices for Tool Palettes

- Customizable palette that organizes and stores frequently used blocks, commands, and tools
- Automatically set layers, styles, and other properties
- Easy to create and share with your team

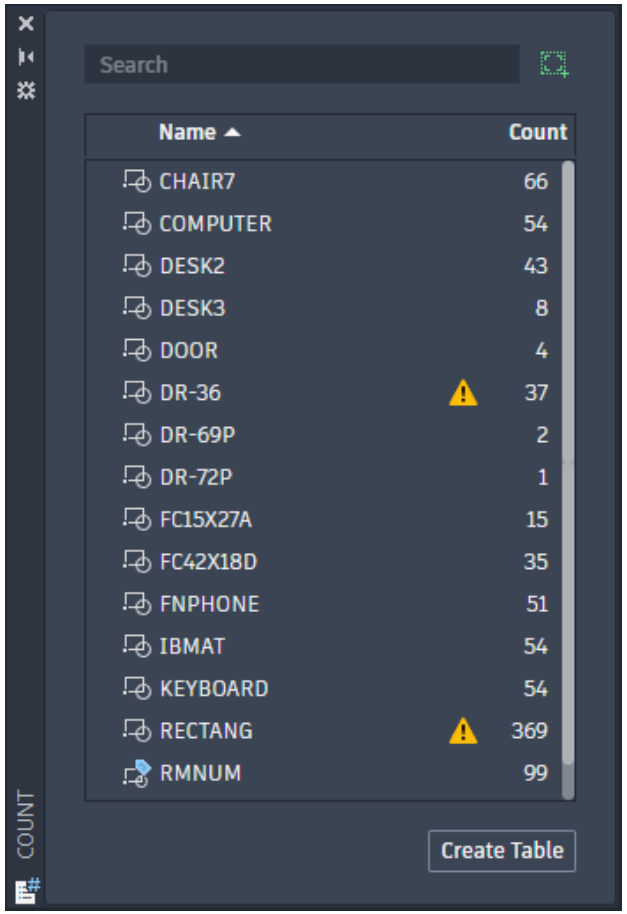




Using Count and Countlist

- The Count palette can be accessed from the View ribbon tab (within the Palettes panel)
- The Count palette allows you to display and manage the counts of blocks in your drawing and includes a tool to insert a table with the count data
- COUNTLIST command opens up the Count palette
- COUNT command allows you to specifically select which items you want to count

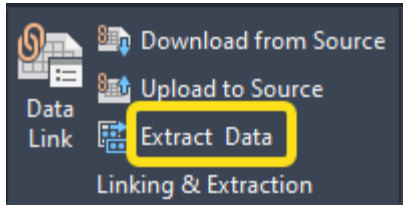
Using Count and Countlist



Item	Count
CHAIR7	66
COMPUTER	54
DESK2	43
DESK3	8
DOOR	4
DR-36	37
DR-69P	2
DR-72P	1
FC15X27A	15
FC42X18D	35
FNPHONE	51
IBMAT	54
KEYBOARD	54
RECTANG	369
RMNUM	99
SOFA2	1

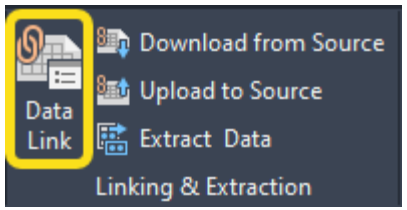
Extracting Data to Tables and Excel

- The Data Extraction tool can be accessed from the Insert ribbon tab (within the Linking & Extraction panel)
- Data Extraction allows you to extract information from your AutoCAD drawing, including block attributes, and export the data to an AutoCAD Table, Excel Spreadsheet, etc.
- Data extracted to an AutoCAD Table is linked to the information in the drawing and is updated automatically when the drawing changes



Linking Excel Spreadsheets

- The Data Link tool can be accessed from the Insert ribbon tab (within the Linking & Extraction panel) as well as directly within the Table command
- The Data Link tool allows you to link Excel spreadsheets as AutoCAD Tables
- Any changes to the Excel spreadsheet will update the table within the AutoCAD drawing file
- A Data Link is a type of external reference



Thank you!

KaDe.King@uscad.com