Irrigation Scheduling on your Phone or Web Browser

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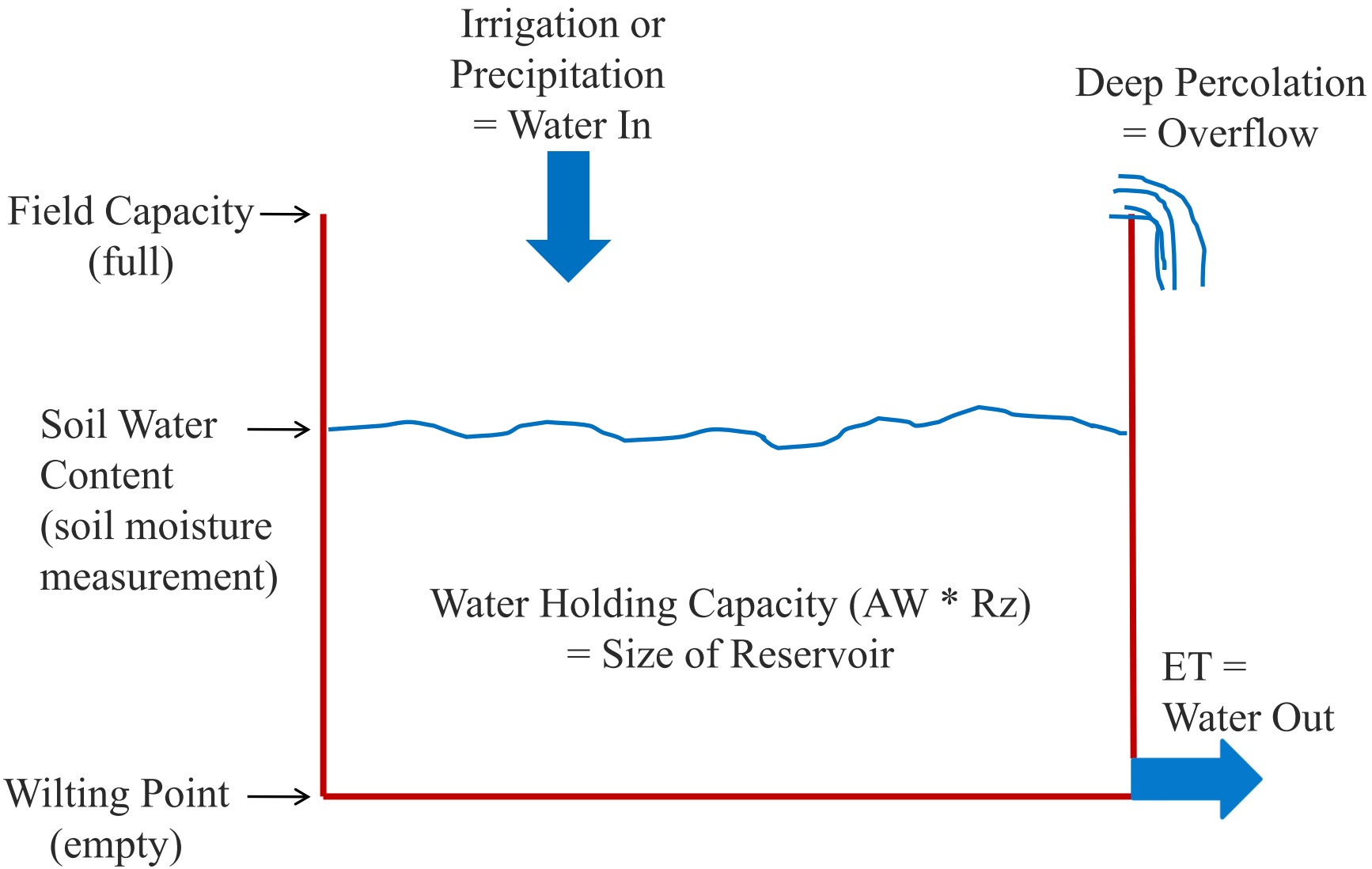
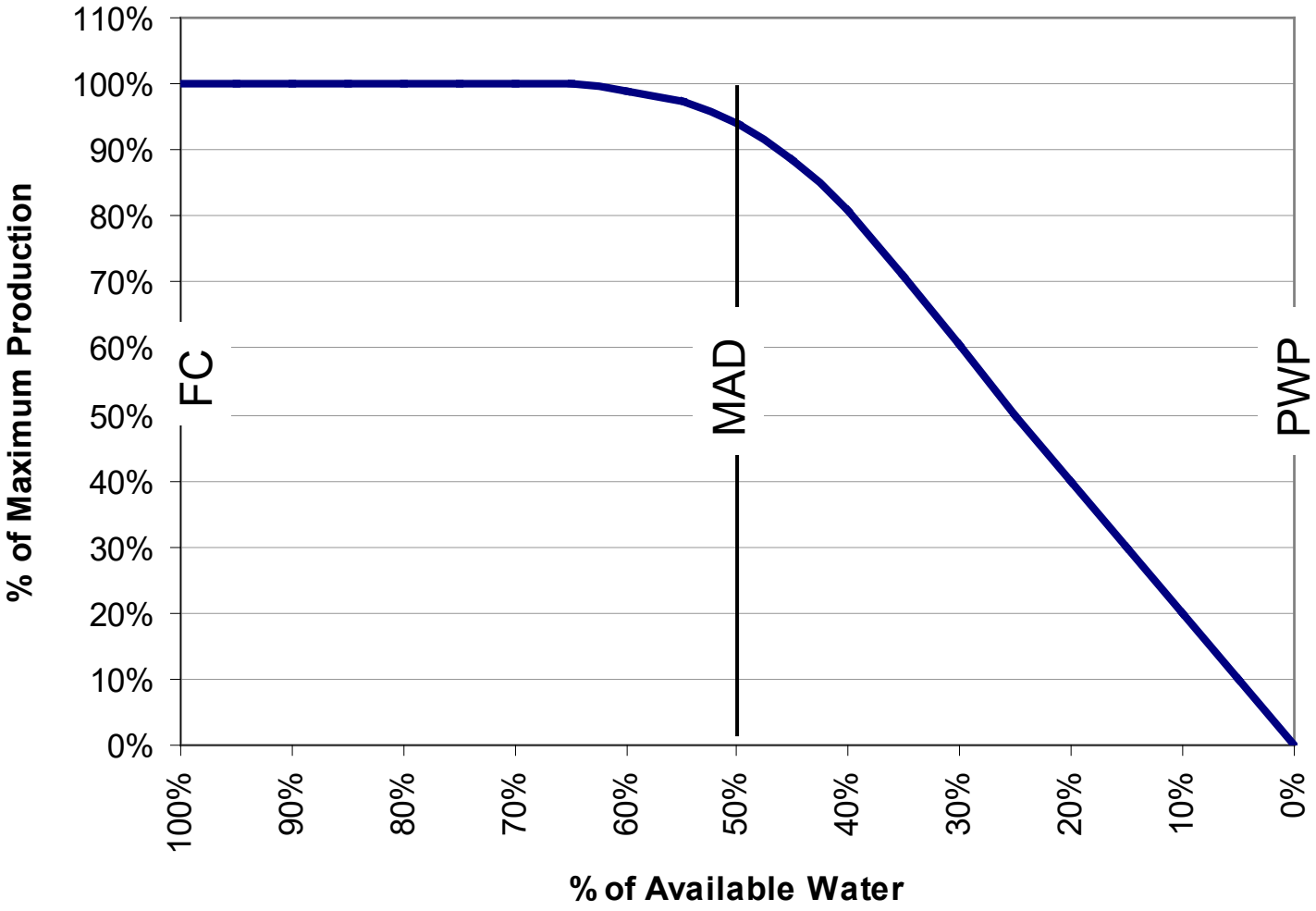
World Class. Face to Face.

Soil is a Water & Nutrient Reservoir



Production Reduction Function



Estimate ET

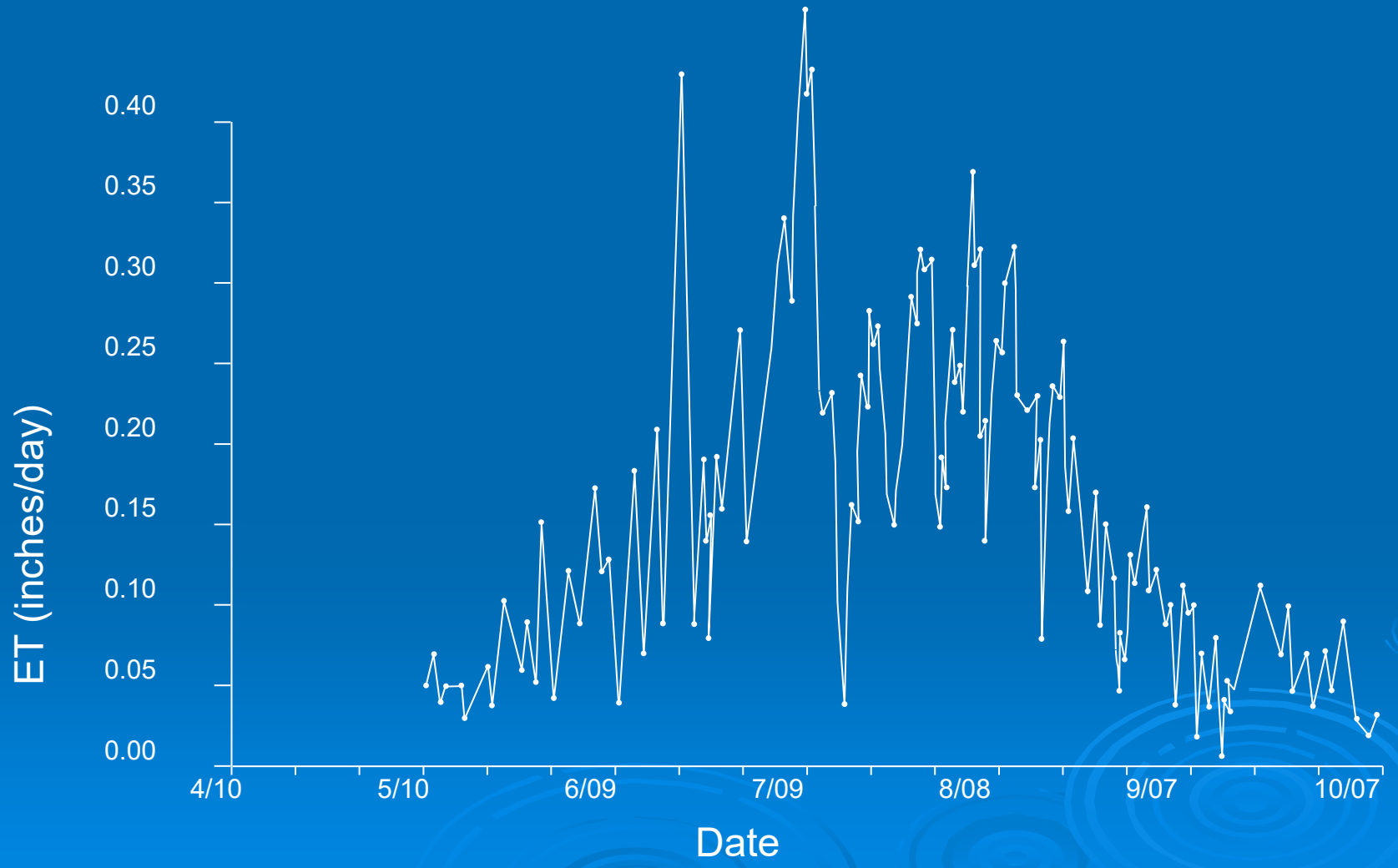
$$ET_c = ET_r \times K_c$$

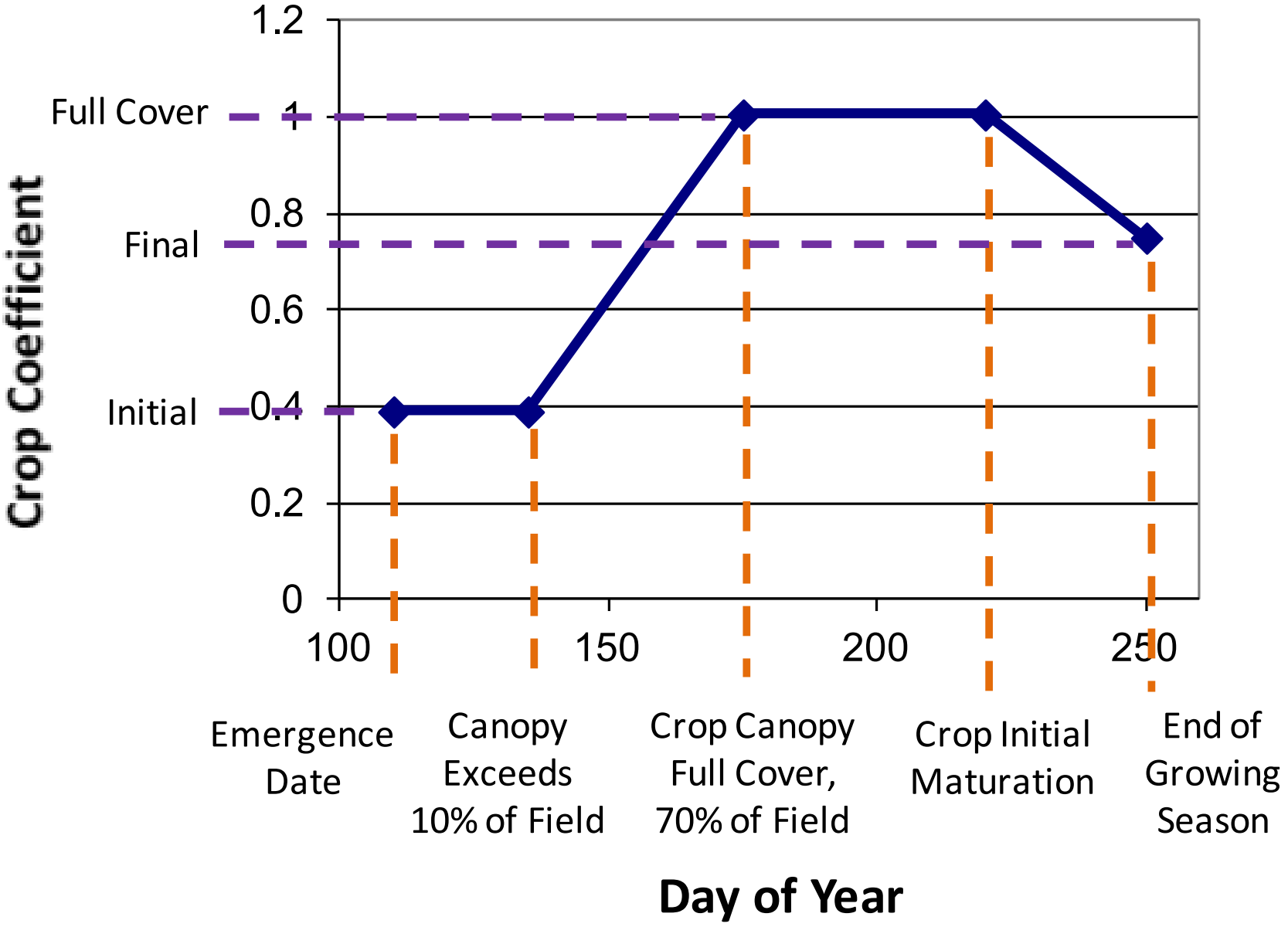
ET_c = crop evapotranspiration

ET_r = evapotranspiration rate of a reference crop (alfalfa). *Function of the weather.*

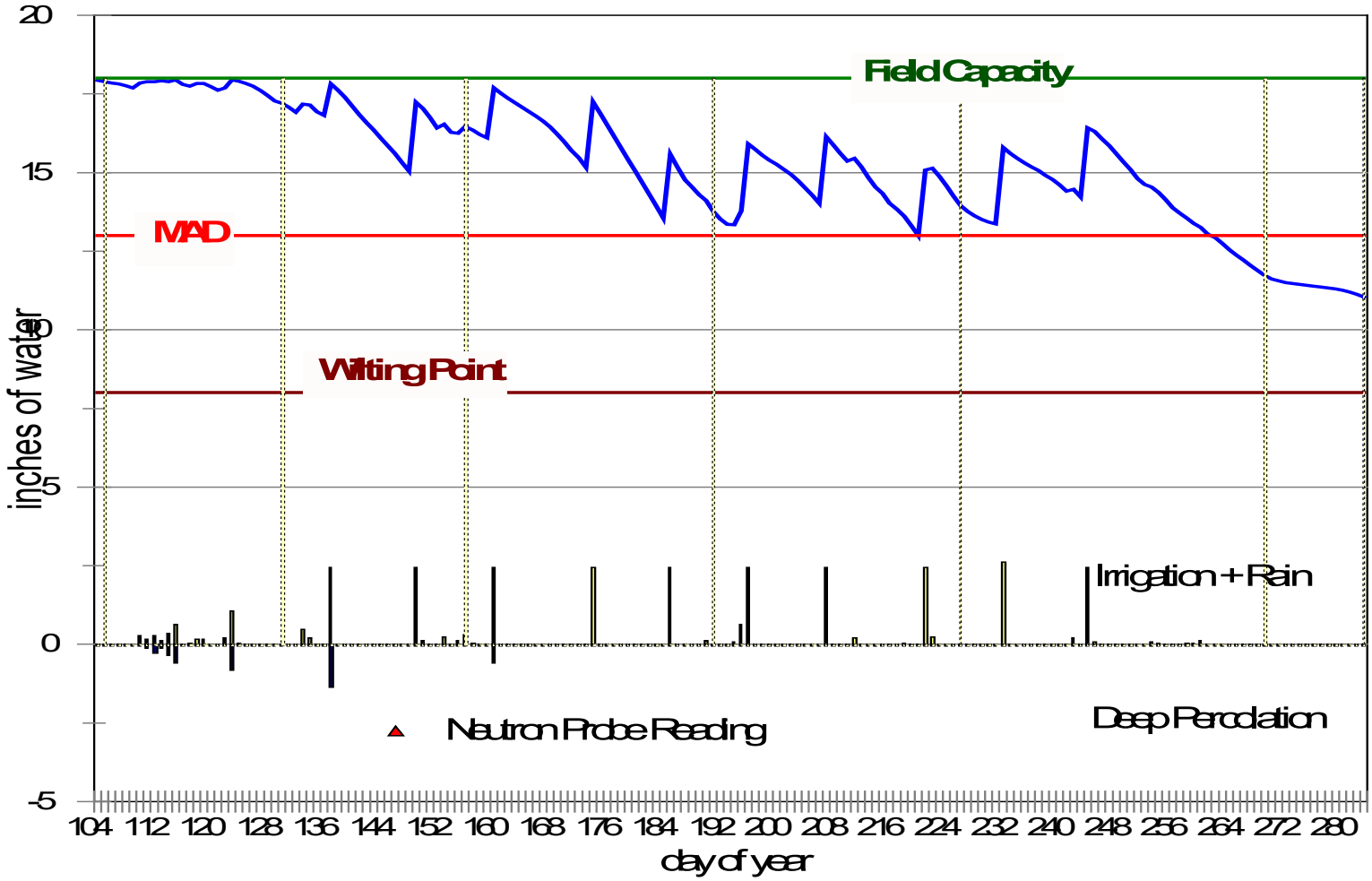
K_c = crop coefficient. *Function of the plants.*

ET and Weather



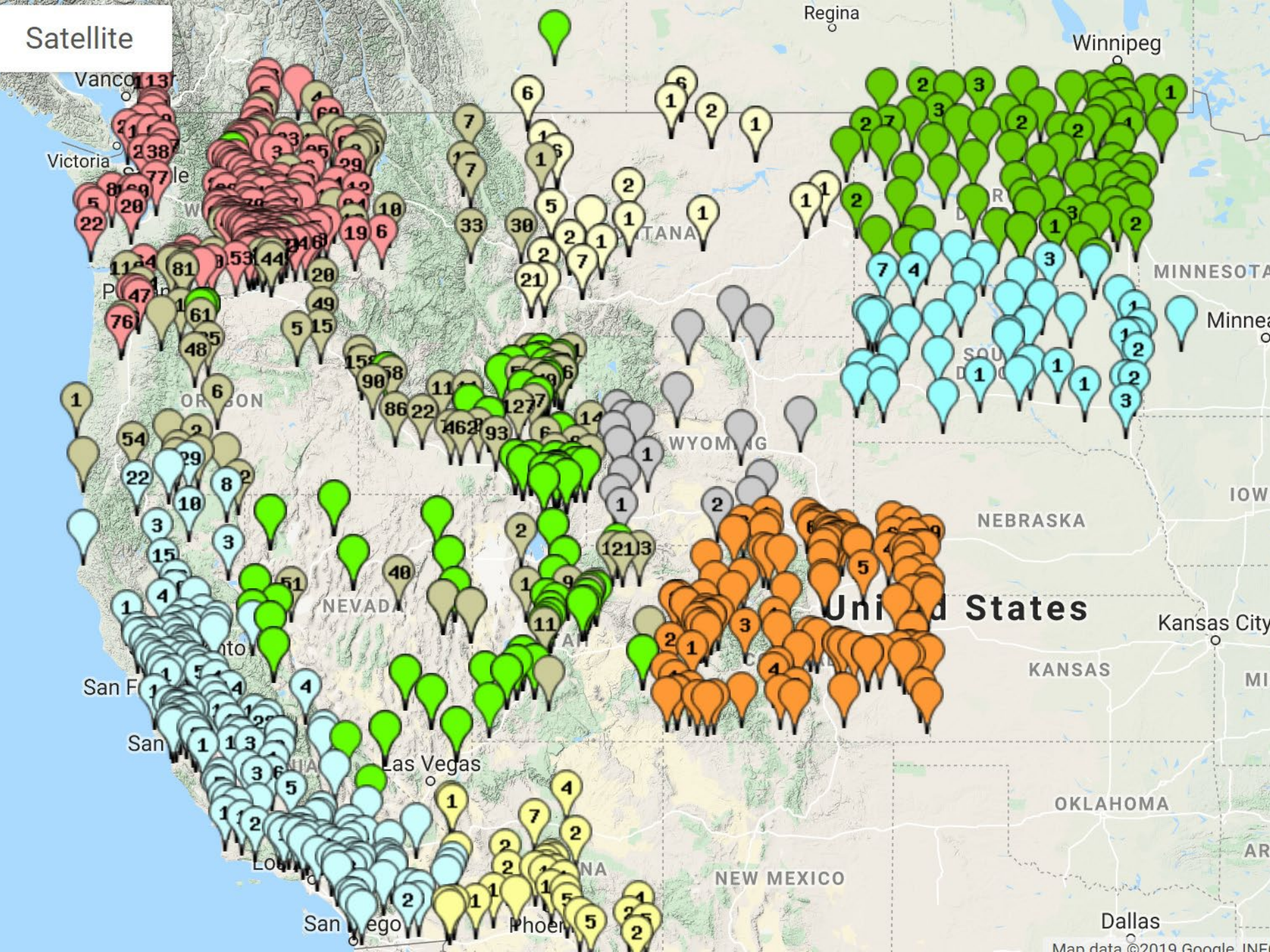

Crop Coefficient
1.2
1
0.8
0.6
0.4
0.2
0
Full Cover
Final
Initial
100
150
200
250
Emergence Date
Canopy Exceeds 10% of Field
Crop Canopy Full Cover, 70% of Field
Crop Initial Maturation
End of Growing Season
Day of Year

Good Irrigation Management



irrigation scheduler mobile

- Simple soil water balance based on ET.
- Designed for use on a smart phone, but usable on any desktop web browser.
- Designed for usability #1.
- Quick & easy to set up.
- Automatically pulls ET data from selected weather stations.
- Can run on any weather network who's data can be automatically accessed.


Satellite
Regina
Winnipeg
Victoria
MINNESOTA
WYOMING
NEBRASKA
NEVADA
KANSAS
OKLAHOMA
NEW MEXICO
Las Vegas
Kansas City
Dallas
Map data ©2019 Google

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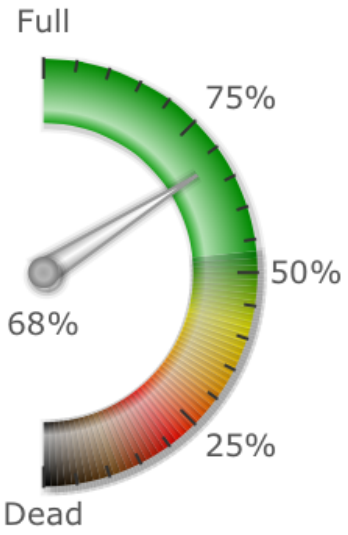
Soil Water Dashboard

Field:

N Pod Pasture, 2014; Grass (Pasture)



This Morning's Soil Water Deficit:	0.9 in. or 5.4 hrs
Today's Irrigation:	0.00 hrs
I Irrigated Today: ☐ hrs	

Save

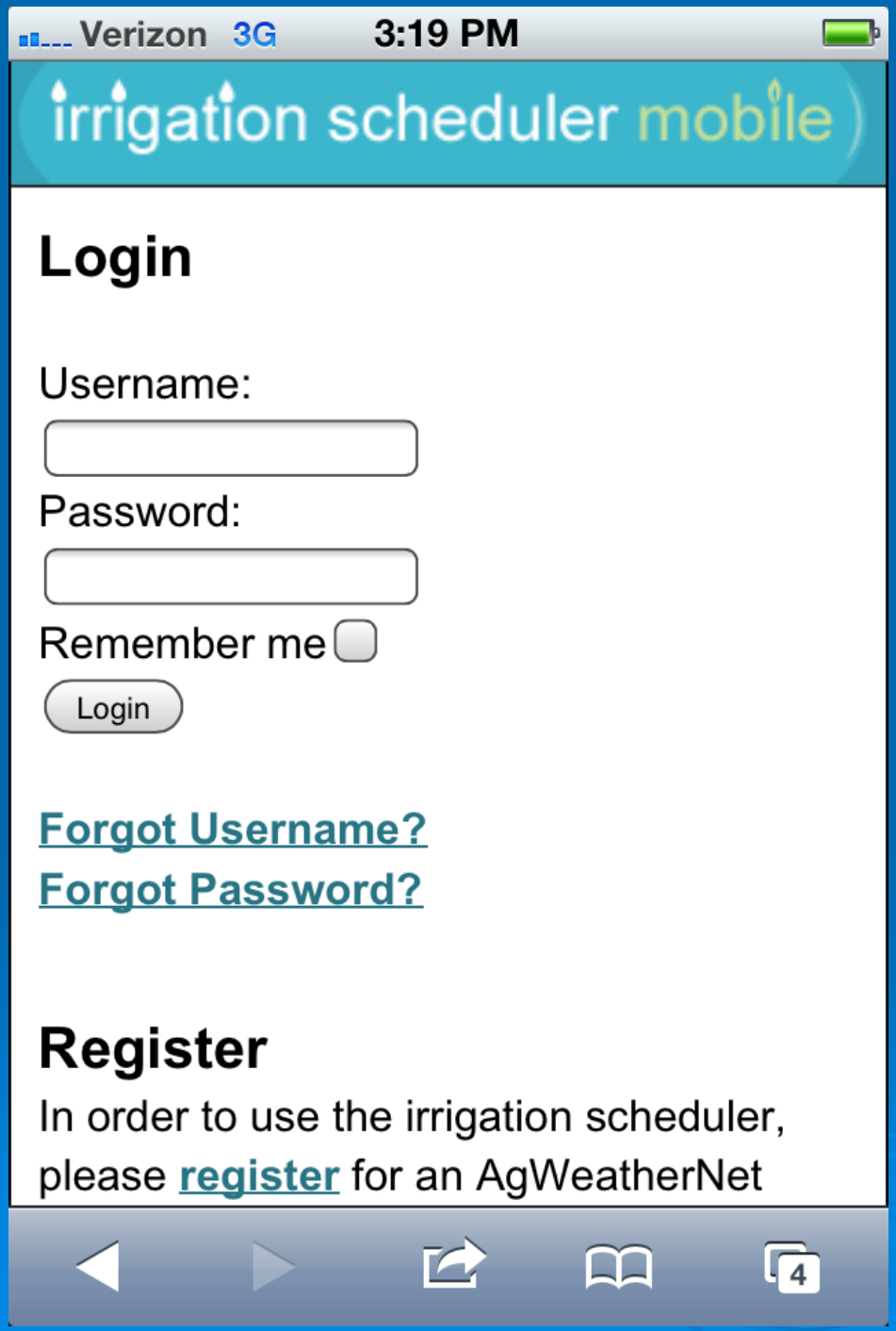
Green is good. Crops increasingly stressed below green.

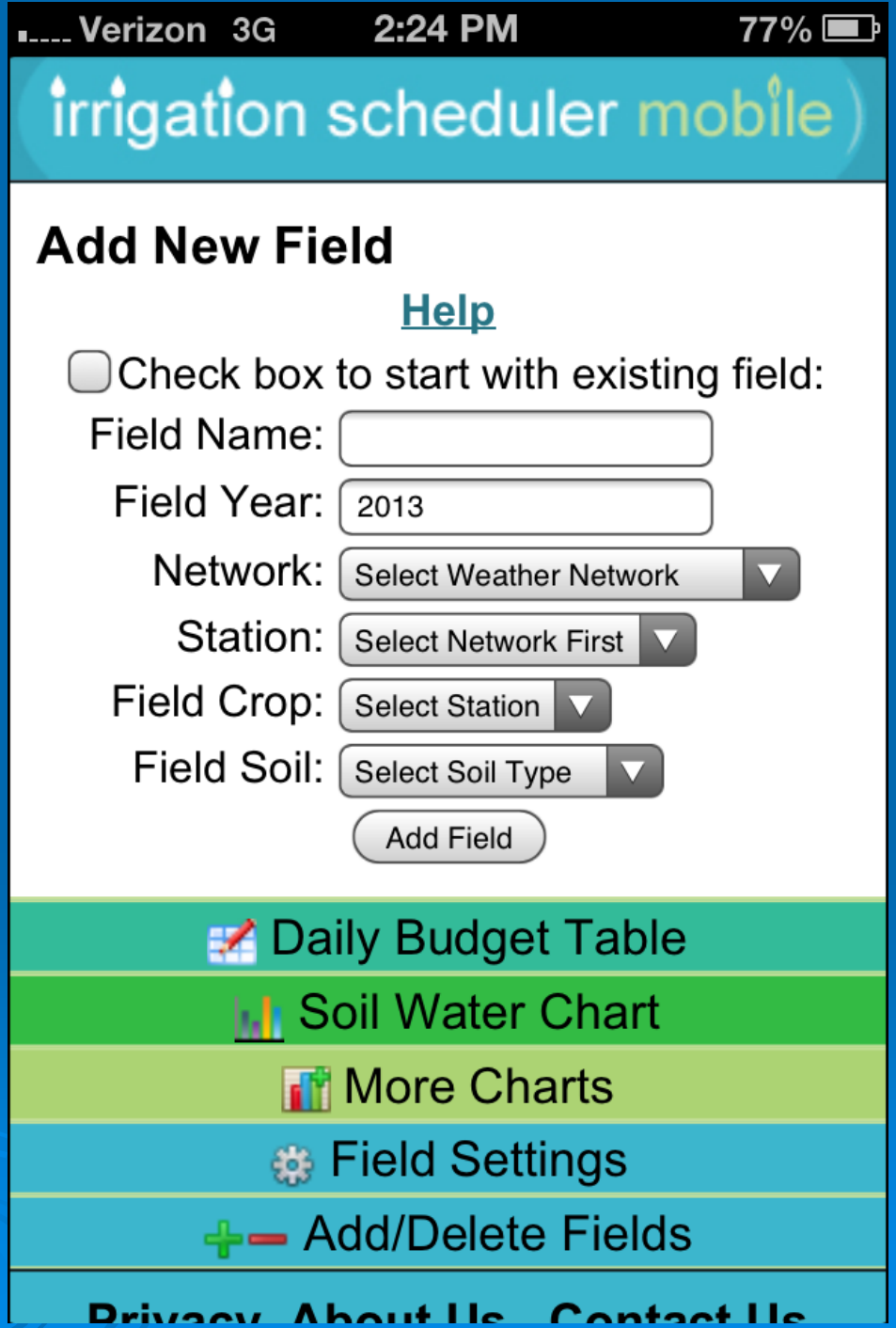
Dashboard

Daily Budget Table

Soil Water Chart

More Charts


Verizon 3G 3:19 PM
irrigation scheduler mobile
Login
Username:
Password:
Remember me
Login
Forgot Username?
Forgot Password?
Register
In order to use the irrigation scheduler, please register for an AgWeatherNet


Verizon 3G 2:24 PM 77%
irrigation scheduler mobile
Add New Field
Help
Check box to start with existing field:
Field Name:
Field Year: 2013
Network: Select Weather Network
Station: Select Network First
Field Crop: Select Station
Field Soil: Select Soil Type
Add Field
Daily Budget Table
Soil Water Chart
More Charts
Field Settings
Add/Delete Fields

Verizon 3G 11:13 AM 100%

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7-Day Daily Budget Table

Field: Potatoes, 2011; Potatoes

Help

Date	Water Use (in)	Rain& Irrig. (in)	Available Water (%)	Water Deficit (in)	Edit Data
07/12	0.22	0	80.9	0.88	Edit
07/13	0.25	0	75.5	1.13	Edit
07/14	0.22	0	70.7	1.35	Edit
07/15	0.24	0	65.4	1.59	Edit
07/16	0.23	0	60.4	1.82	Edit
07/17	0.22	1	77.5	1.04	Edit
07/18	0.2	0	73.1	1.24	Edit

|<< <<< Jul 12, 2011 >>> >>|

Verizon 3G 4:30 PM 88%

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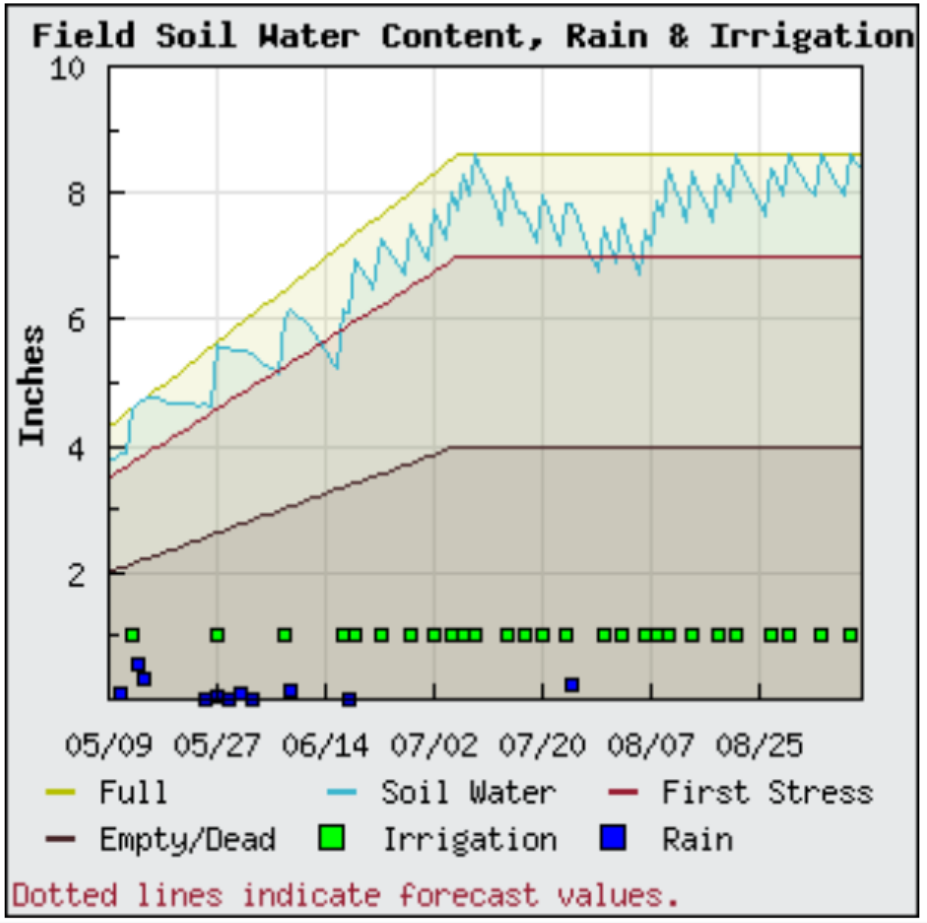
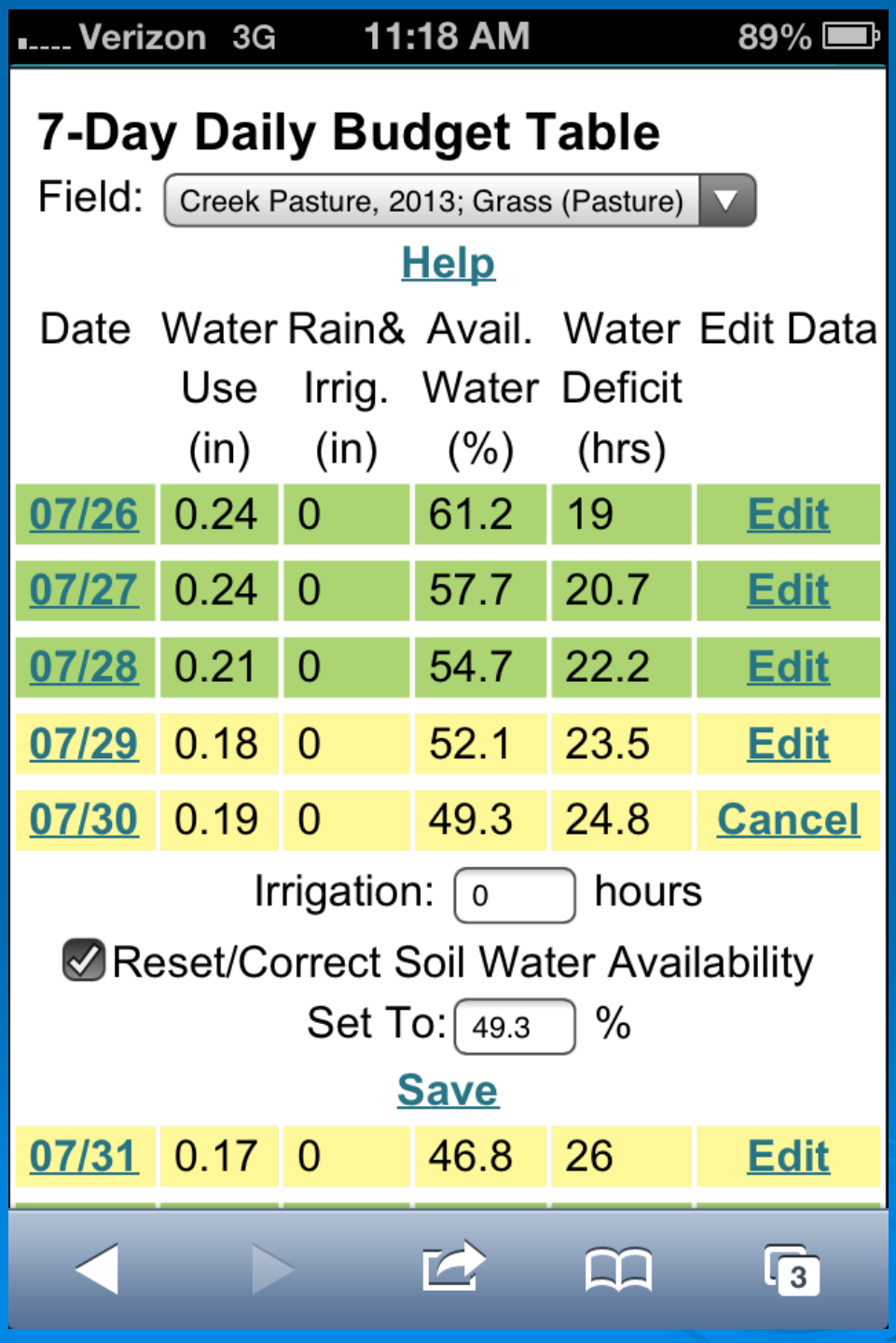
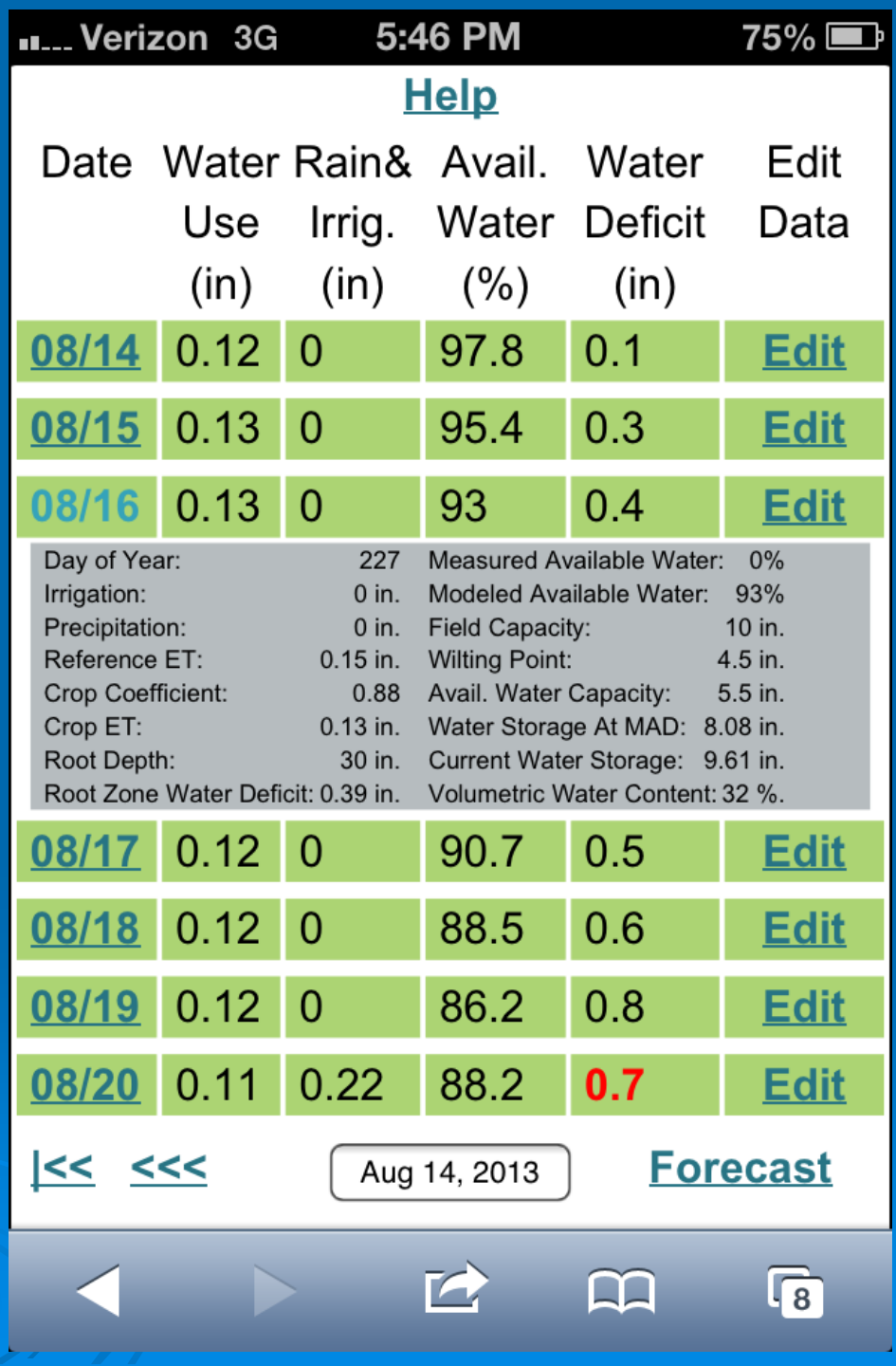
Field: Potatoes, 2011; Potatoes

Help




Verizon 3G 11:18 AM 89%
7-Day Daily Budget Table
Field: Creek Pasture, 2013; Grass (Pasture)
Help
Date | Water Use (in) | Rain& Irrig. (in) | Avail. Water (%) | Water Deficit (hrs) | Edit Data
07/26 | 0.24 | 0 | 61.2 | 19 | Edit
07/27 | 0.24 | 0 | 57.7 | 20.7 | Edit
07/28 | 0.21 | 0 | 54.7 | 22.2 | Edit
07/29 | 0.18 | 0 | 52.1 | 23.5 | Edit
07/30 | 0.19 | 0 | 49.3 | 24.8 | Cancel
Irrigation: 0 hours
Reset/Correct Soil Water Availability
Set To: 49.3 %
Save
07/31 | 0.17 | 0 | 46.8 | 26 | Edit


Verizon 3G 5:46 PM 75%
Help
Date | Water Use (in) | Rain& Irrig. (in) | Avail. Water (%) | Water Deficit (in) | Edit Data
08/14 | 0.12 | 0 | 97.8 | 0.1 | Edit
08/15 | 0.13 | 0 | 95.4 | 0.3 | Edit
08/16 | 0.13 | 0 | 93 | 0.4 | Edit
Day of Year: 227
Irrigation: 0 in.
Precipitation: 0 in.
Reference ET: 0.15 in.
Crop Coefficient: 0.88
Crop ET: 0.13 in.
Root Depth: 30 in.
Root Zone Water Deficit: 0.39 in.
Measured Available Water: 0%
Modeled Available Water: 93%
Field Capacity: 10 in.
Wilting Point: 4.5 in.
Avail. Water Capacity: 5.5 in.
Water Storage At MAD: 8.08 in.
Current Water Storage: 9.61 in.
Volumetric Water Content: 32 %.
08/17 | 0.12 | 0 | 90.7 | 0.5 | Edit
08/18 | 0.12 | 0 | 88.5 | 0.6 | Edit
08/19 | 0.12 | 0 | 86.2 | 0.8 | Edit
08/20 | 0.11 | 0.22 | 88.2 | 0.7 | Edit
|<< <<< Aug 14, 2013 Forecast

Verizon 3G 11:20 AM 88%

08/08	0.3	0	91.4	0.5	Edit

|<< <<< Aug 02, 2013 Forecast

- Daily Budget Table
- Soil Water Chart
- Less Charts
- Daily Water Use Chart
- Cumulative Water Chart
- Crop Coefficient Chart
- Deep Water Loss Chart
- Water Stress Chart
- Field Settings
- Add/Delete Fields

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Verizon 3G 11:26 AM 100%

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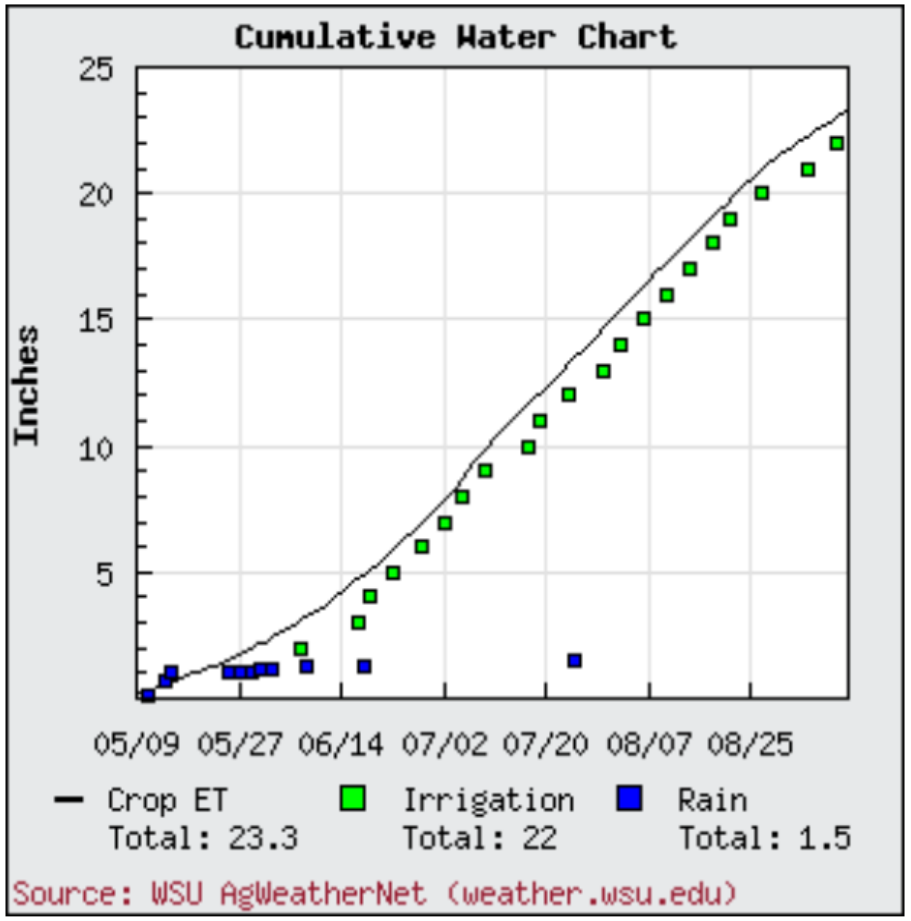
Field: Potatoes, 2011; Potatoes

Help

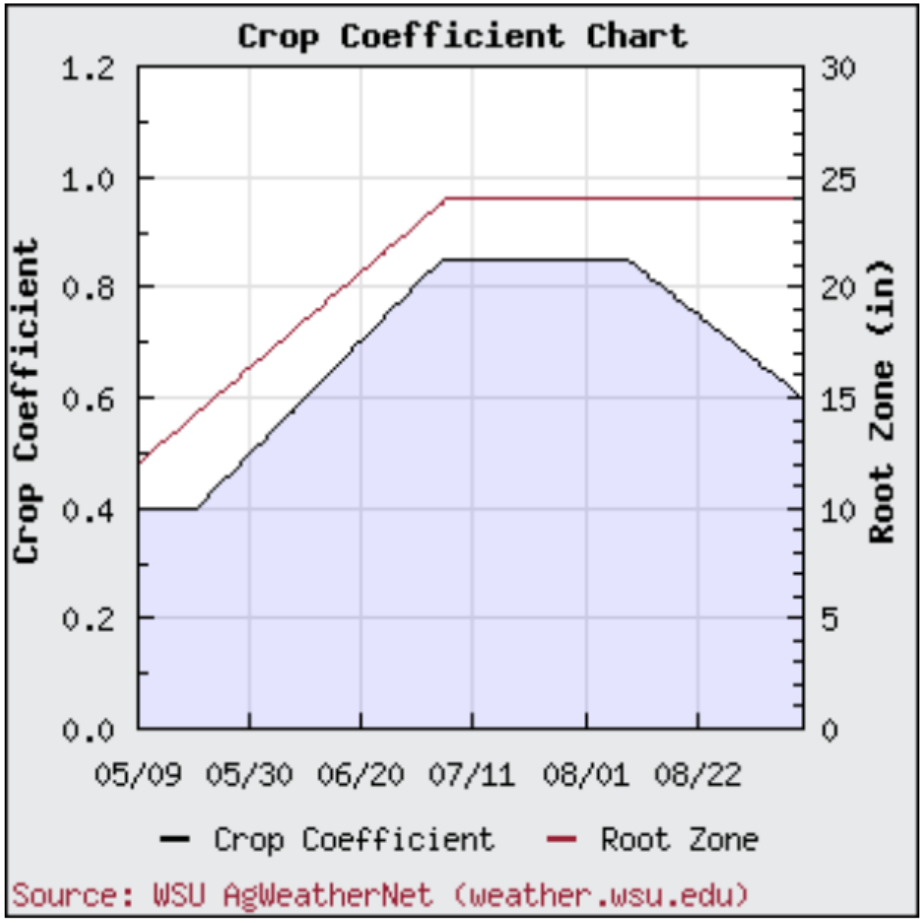


Verizon 3G 11:26 AM 100%

irrigation scheduler mobile

Field: Potatoes, 2011; Potatoes

Help



Verizon 3G 11:25 AM 100%

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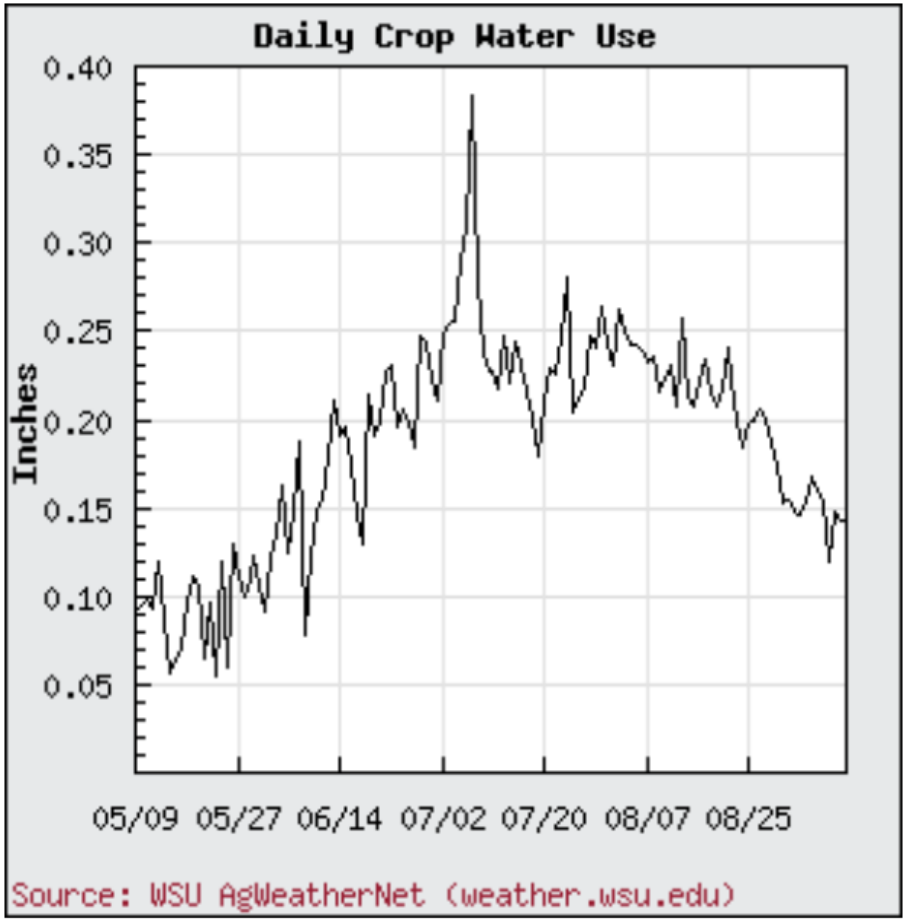
Field: Potatoes, 2011; Potatoes

Help



Verizon 3G 11:26 AM 100%

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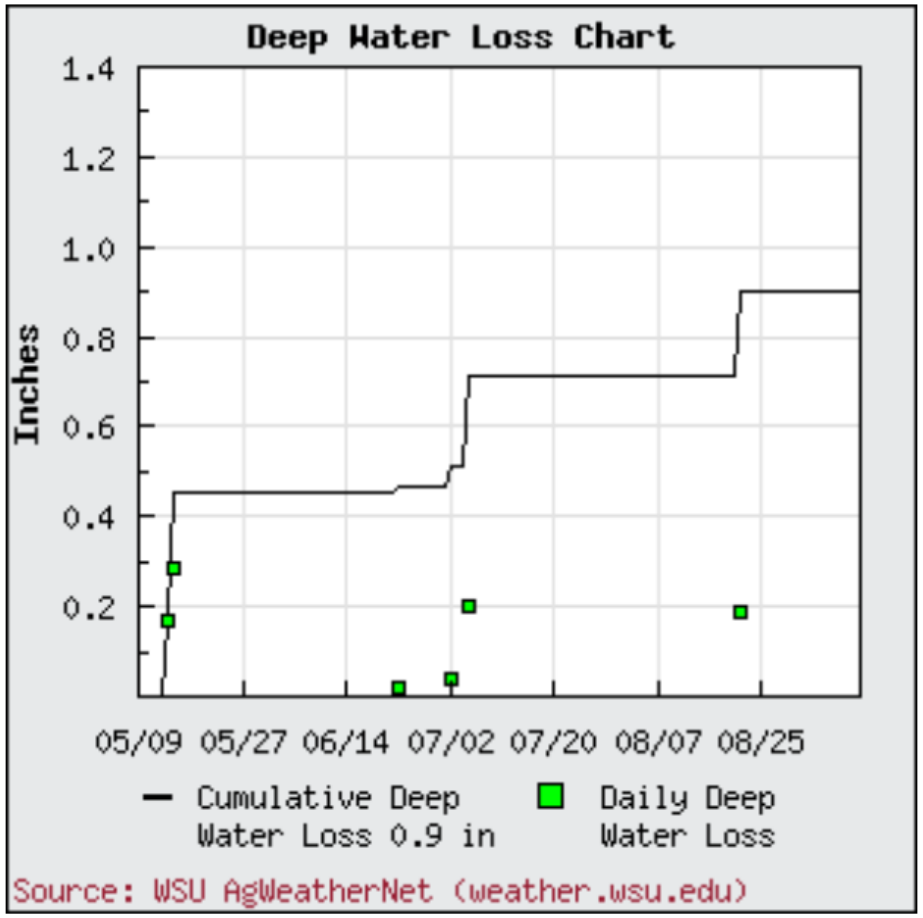
Field: Potatoes, 2011; Potatoes

Help



Verizon 3G 10:23 AM

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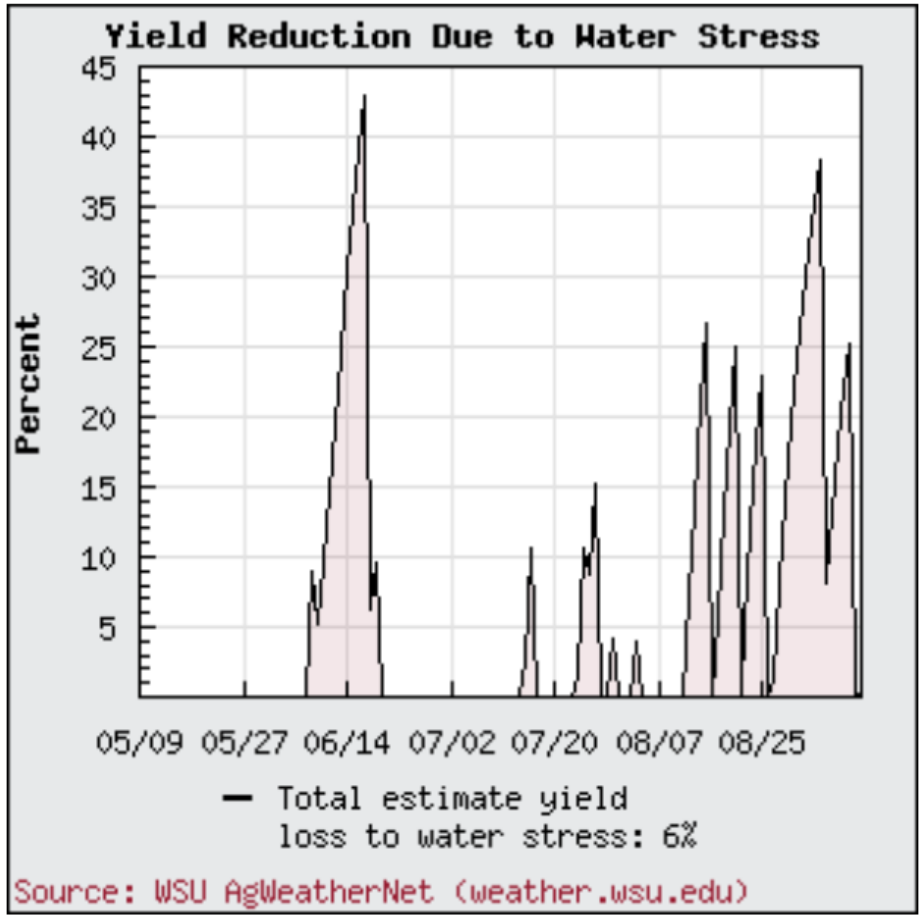
Field: Potatoes, 2011; Potatoes

Help

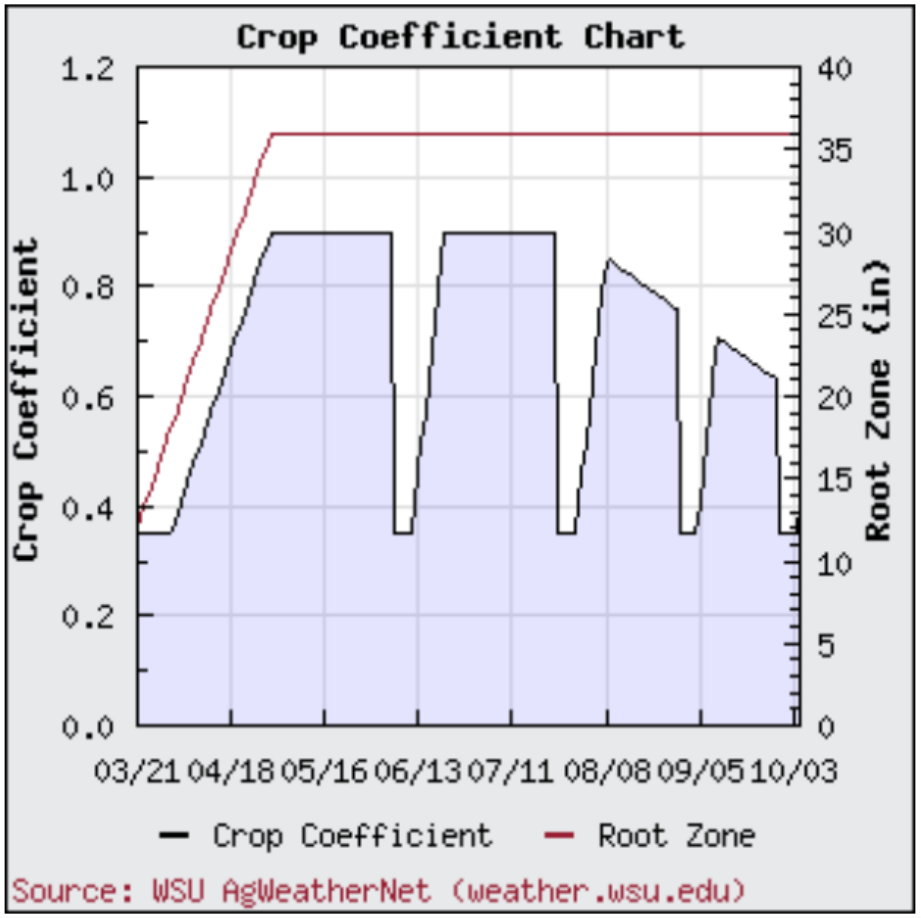


Verizon 3G 5:20 PM 81%

irrigation scheduler mobile

Field: CutHay, 2012; Grass (Hay)

Help



Verizon 3G 9:17 AM 90%

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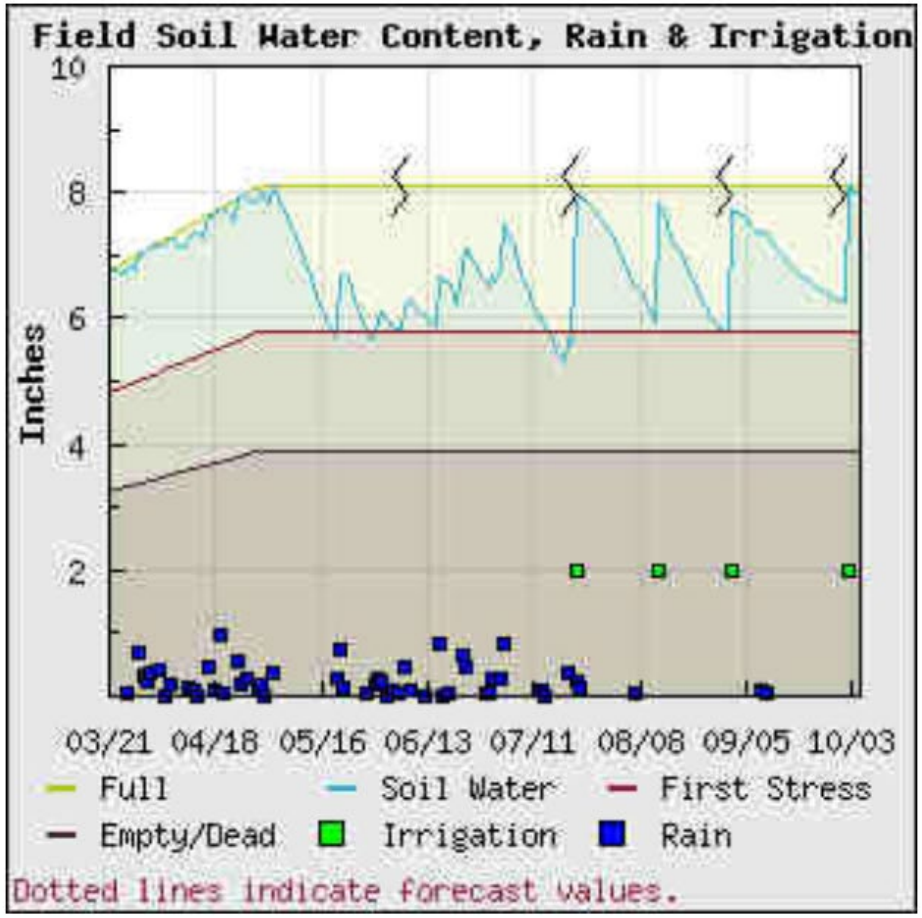
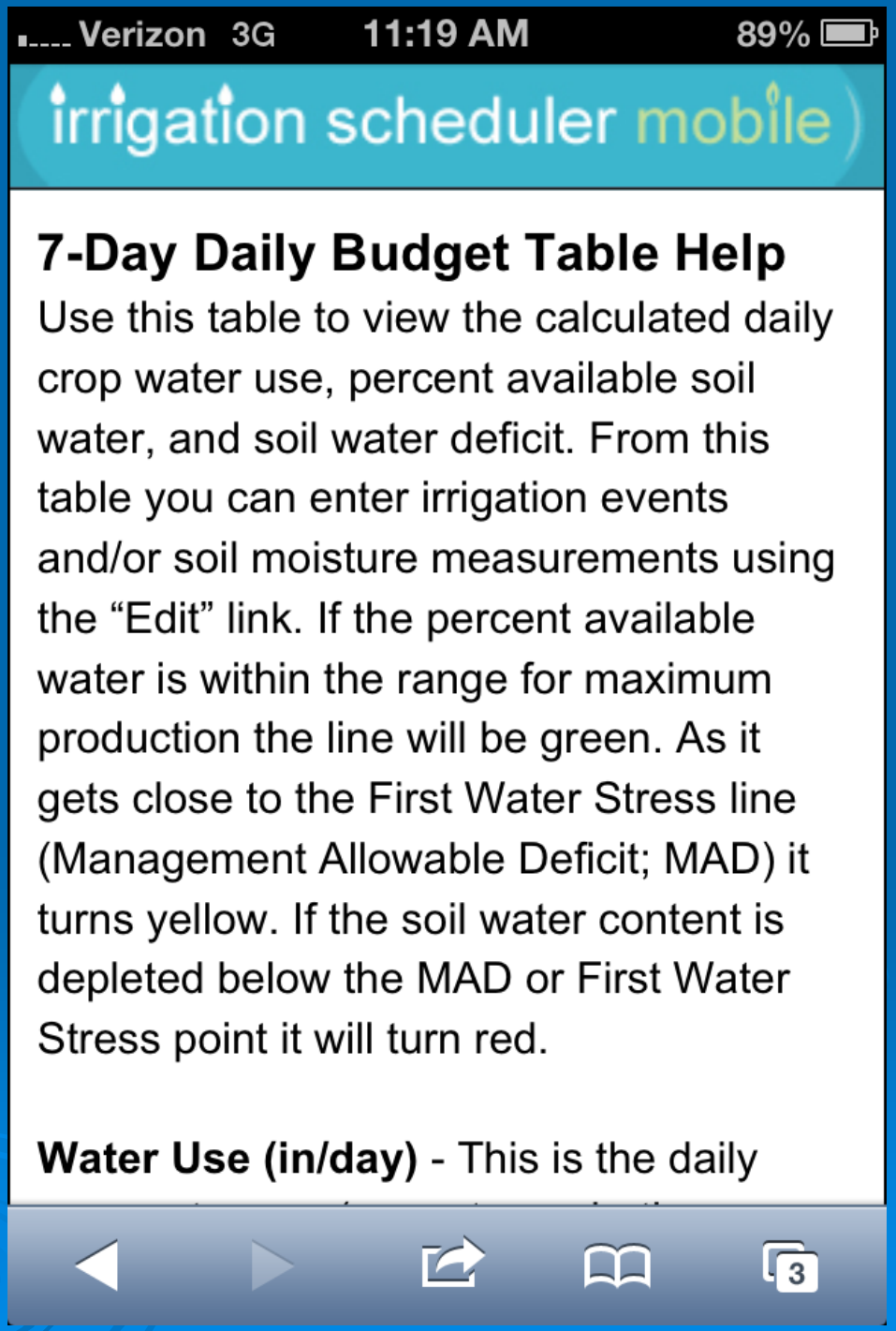
Field: CutHay, 2012; Grass (Hay)

Help



Specific help link on every screen



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Or wherever you get your mobile phone apps.

weather.wsu.edu/ism