



Natural Resources District

2021 SPRING WATER LEVELS

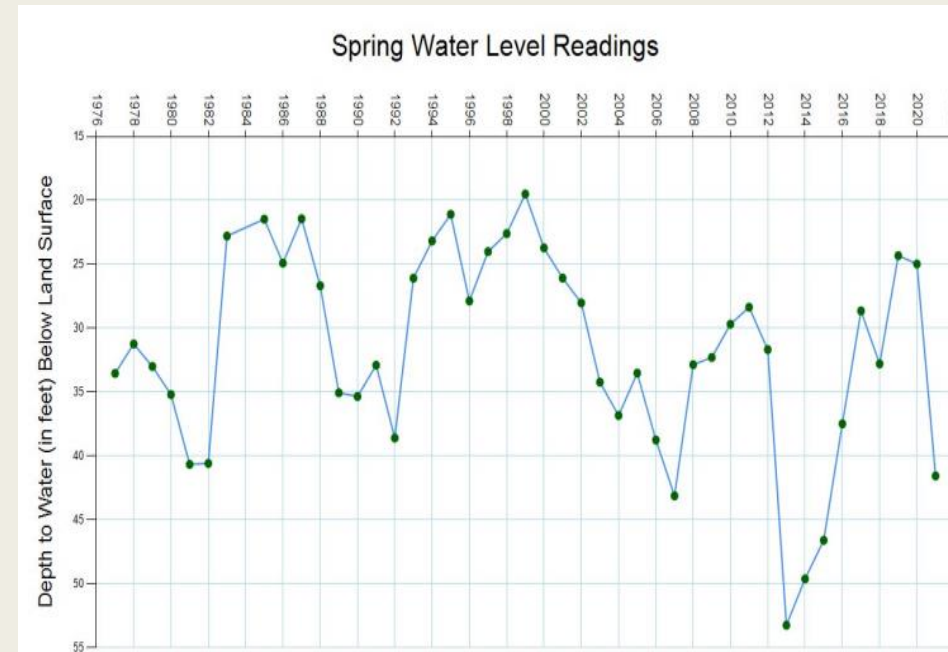
# 2021 SPRING WATER LEVELS

- MEASUREMENTS CONDUCTED FROM MID-MARCH THROUGH APRIL
- THANKS TO JOSH, TODD, AND MIKE M.
- 240 WELLS THROUGHOUT THE DISTRICT WERE MEASURED
- WELLS DECREASED AN AVERAGE OF 2.42' ACROSS THE DISTRICT
  - 12 WELLS INCREASED IN WATER LEVEL (5%)
  - 211 WELLS DECREASED IN WATER LEVEL (88%)
  - 16 WELLS HAD NO CHANGE (7%)
  - 1 NEW WELL MEASURED
- LONG TERM MONITORING OF WATER LEVELS ARE DONE TO OBTAIN LONG TERM DATA, AND USED AS CRITERIA FOR GROUNDWATER QUANTITY TRIGGERS LOCATED IN RULE 12 OF THE DISTRICT'S RULES AND REGS

# 2021 SPRING WATER LEVELS

WELLS CAN BE HIGHLY VARIABLE, DEPENDING ON:

- DEPTH OF WELL
- LOCATION
- HYDROLOGICAL CONNECTIVITY
- REGIONAL AQUIFER CONDITIONS

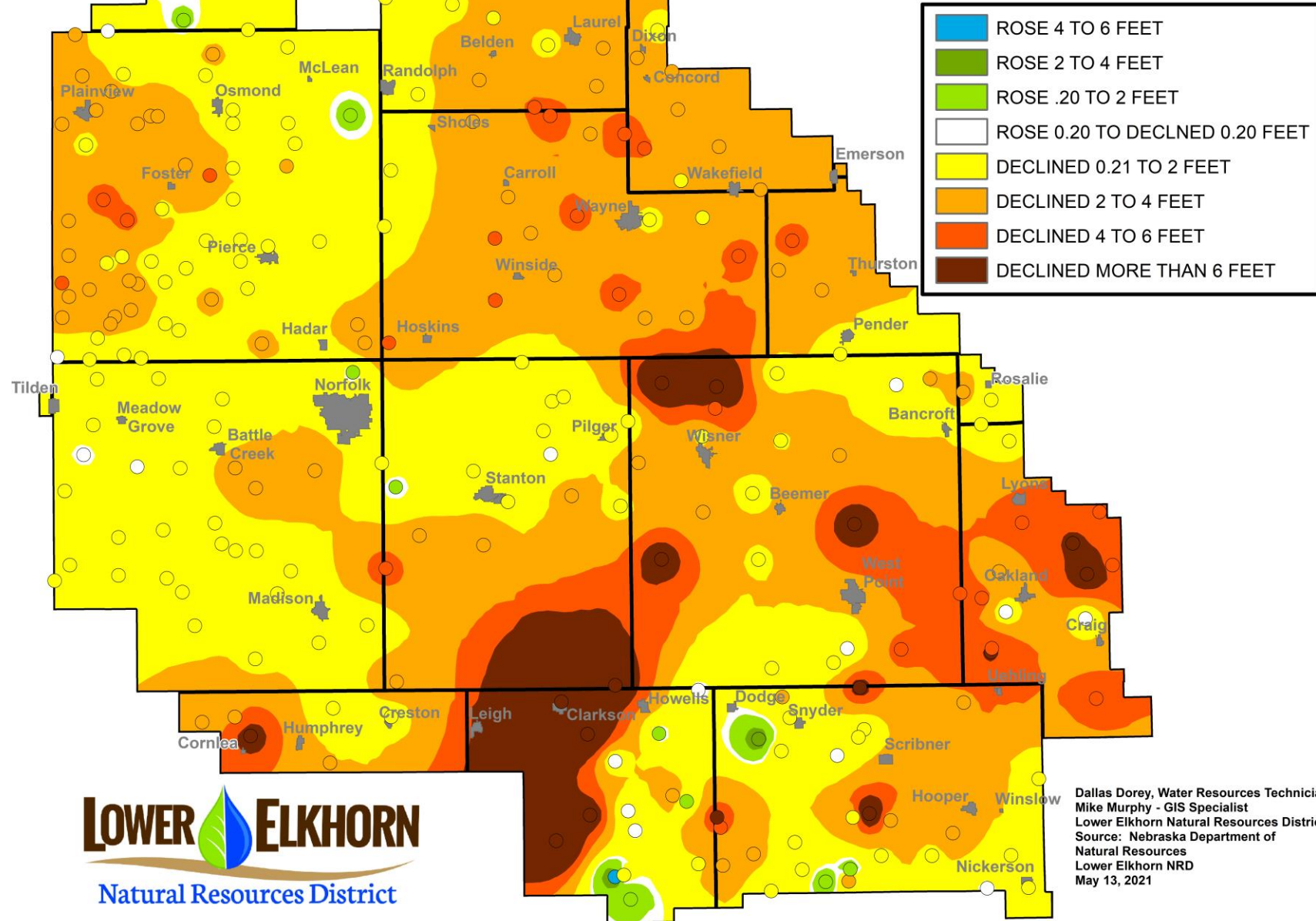


# 2021 SPRING WATER LEVELS

## WEATHER RECAP

- JUNE 16, 2020: 1<sup>ST</sup> AREAS OF D0 (ABNORMALLY DRY) DROUGHT. GENERALLY THE EAST 2/3 OF THE DISTRICT.
- JULY 7, 2020: MOST OF DISTRICT IN D1 OR D0, PORTIONS OF PIERCE/MADISON COUNTIES NORMAL
- JULY 14, 2020: EAST 2/3 OF DISTRICT IN D1.
- AUGUST 4, 2020: 1<sup>ST</sup> AREA OF D2 DROUGHT IN EAST HALF OF DISTRICT
- SEPTEMBER 8, 2020: AREA OF D3 DROUGHT IN BURT/CUMING/DODGE/THURSTON COUNTIES
- OCTOBER 13, 2020: D3 DROUGHT GONE FROM DISTRICT
- FEBRUARY 16, 2021: D2 DROUGHT GONE FROM DISTRICT
- MARCH 16, 2021: D1 DROUGHT GONE FROM DISTRICT
- CURRENTLY: STILL A SLIVER OF D0 IN NORTHERN PIERCE CO., SW CEDAR CO. AND KNOX CO.

# LENRD DISTRICT CHANGES IN WATER LEVELS FROM SPRING 2020 TO SPRING 2021, IN FEET

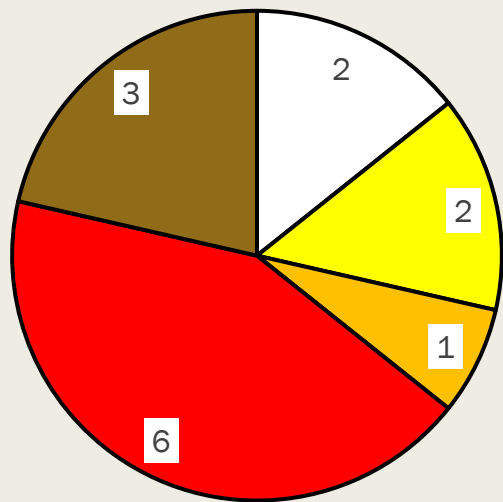


Dallas Dorey, Water Resources Technician  
Mike Murphy - GIS Specialist  
Lower Elkhorn Natural Resources District  
Source: Nebraska Department of Natural Resources  
Lower Elkhorn NRD  
May 13, 2021

# BURT COUNTY

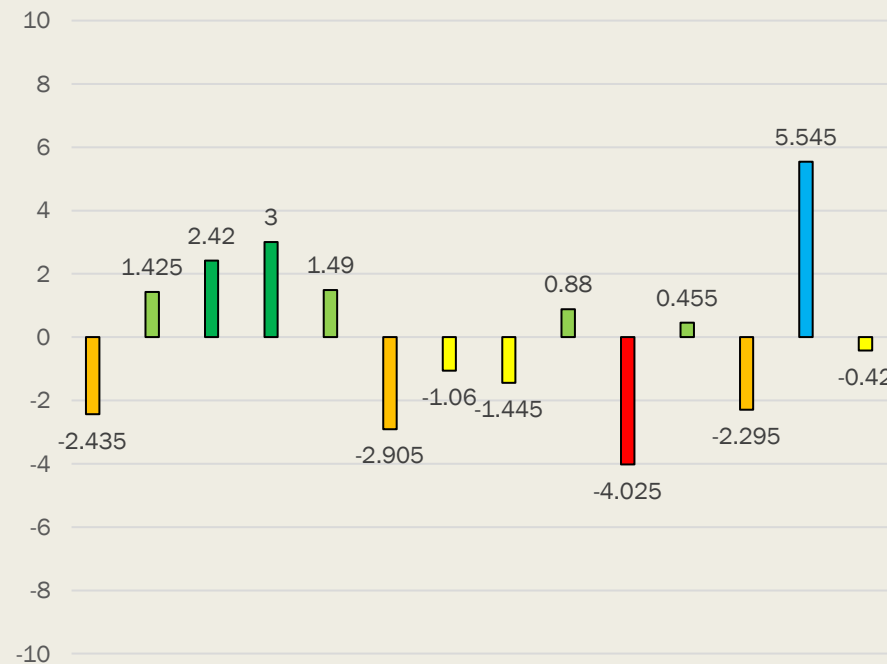
14 WELLS: DECREASED AVERAGE OF 4.14' FROM 2020

2021 SWL Compared to 2020



■ Unchanged (+/- 0.2) ■ Down .2'-2' ■ Down 2'-4' ■ Down 4'-6' ■ Down > 6'

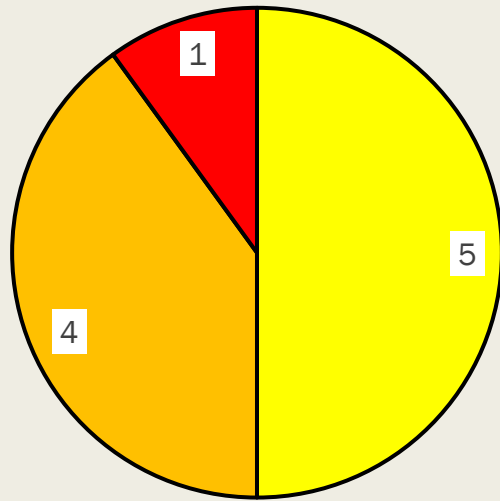
2021 Readings Compared to Historic Mid-Points



# CEDAR COUNTY

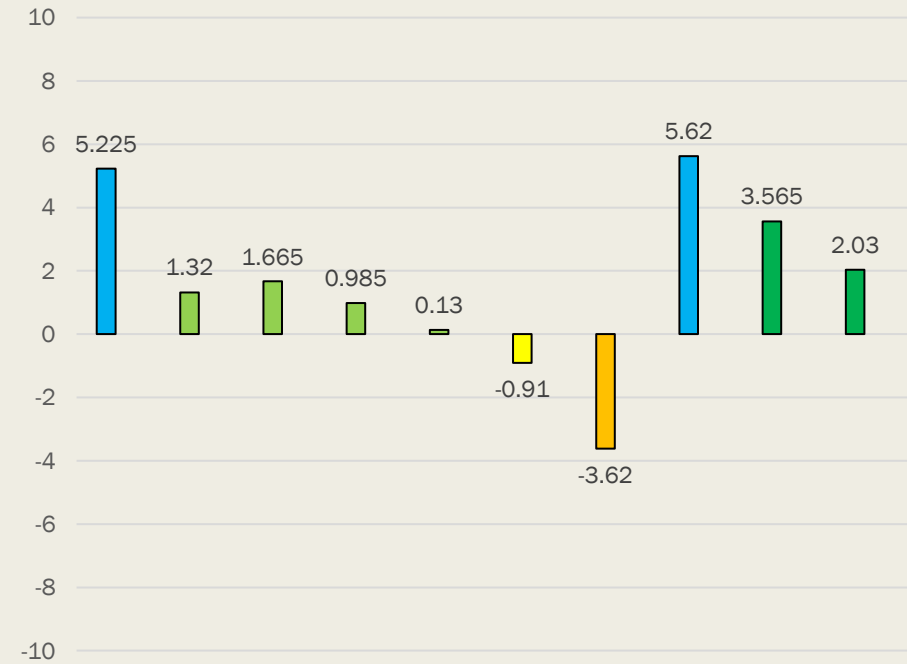
11 WELLS: DECREASED AVERAGE OF 2.68' FROM 2020 (ONE NEW WELL)

2021 SWL Compared to 2020



■ Down .2'-2' ■ Down 2'-4' ■ Down 4'-6'

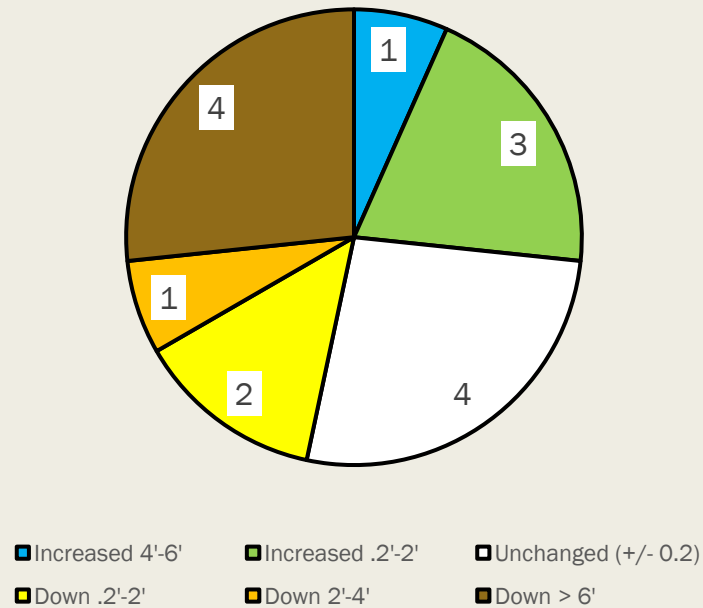
2021 Readings Compared to Historic Mid-Points



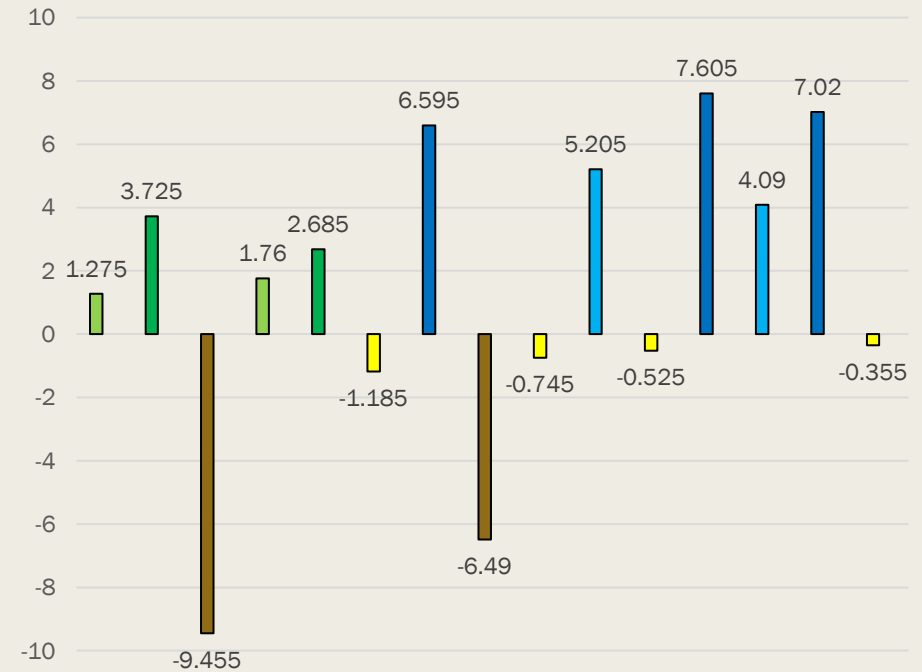
# COLFAX COUNTY

## 15 WELLS: DECREASED AVERAGE OF 3.5' FROM 2020

2021 SWL Compared to 2020



2021 Readings Compared to Historic Mid-Points

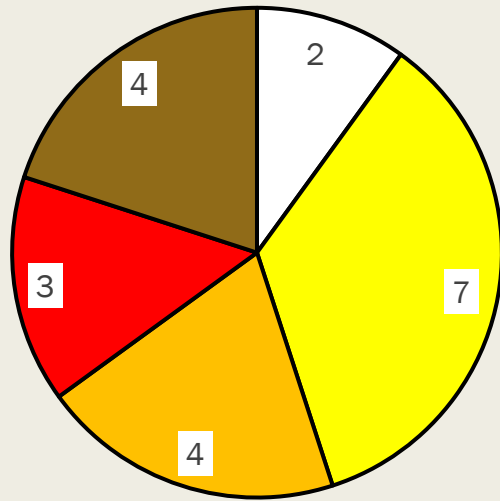




# CUMING COUNTY

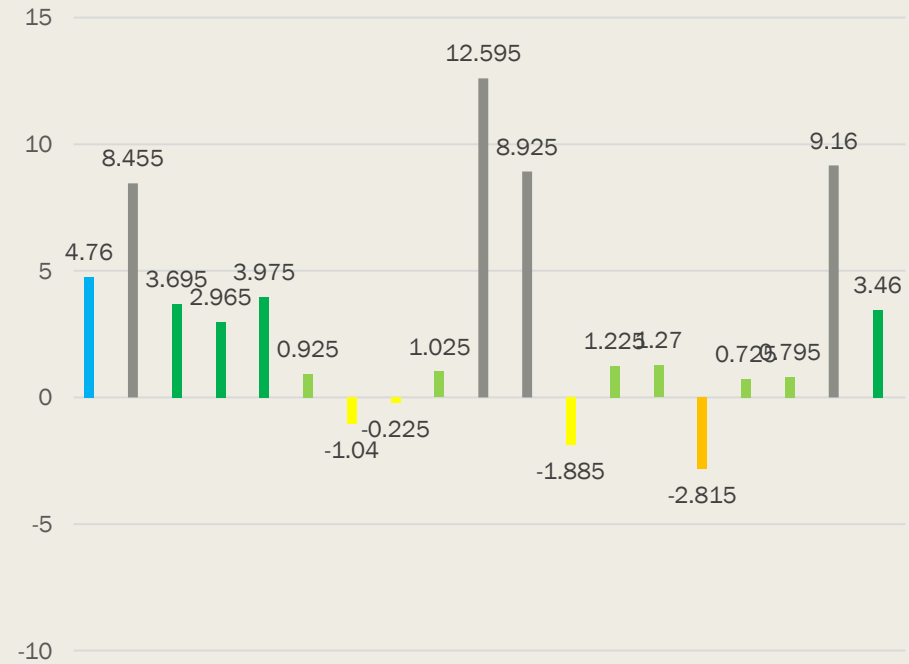
20 WELLS: DECREASED AVERAGE OF 3.65' FROM 2020

2021 SWL Compared to 2020



■ Unchanged (+/- 0.2) 
 ■ Down .2'-2' 
 ■ Down 2'-4' 
 ■ Down 4'-6' 
 ■ Down > 6'

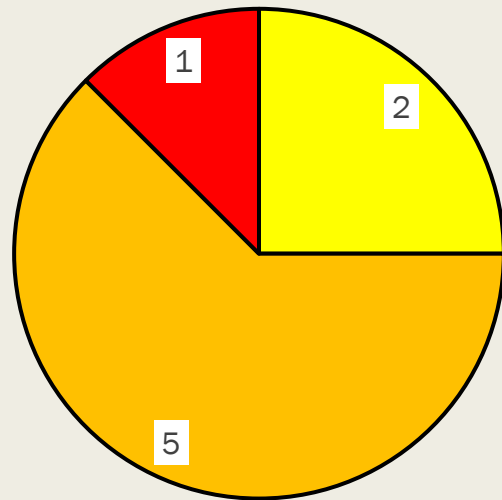
2021 Readings Compared to Historic Mid-Points



# DIXON COUNTY

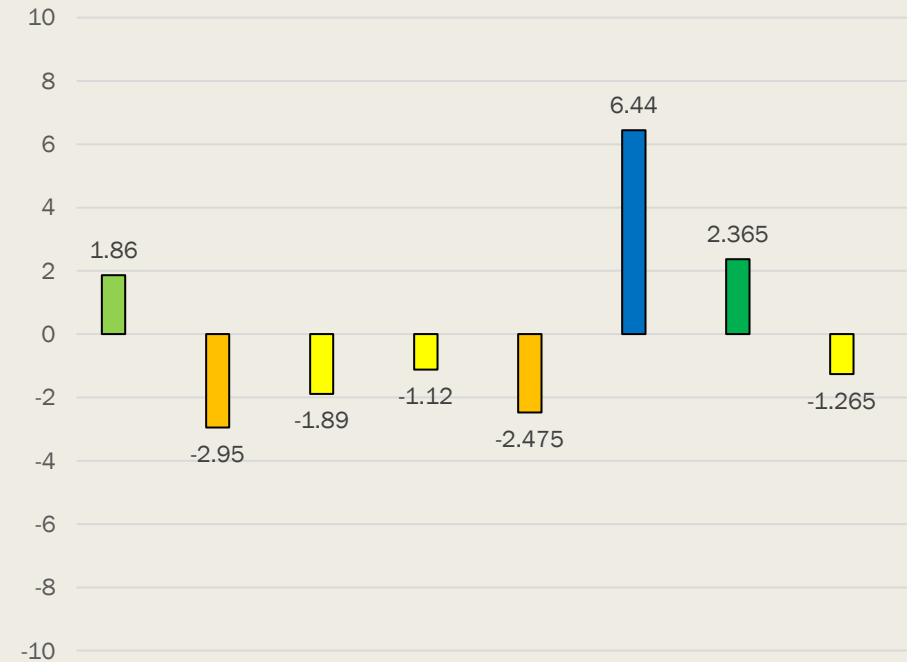
## 8 WELLS: DECREASED AVERAGE OF 2.85' FROM 2020

2021 SWL Compared to 2020



■ Down .2'-2' ■ Down 2'-4' ■ Down 4'-6'

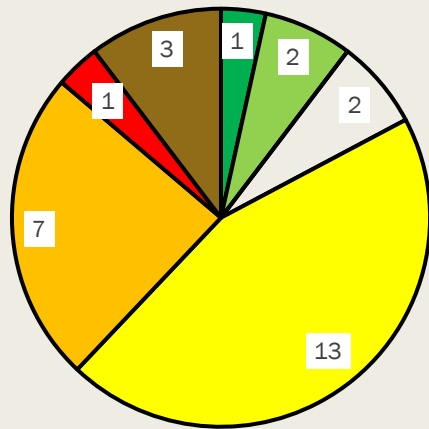
2021 Readings Compared to Historic Mid-Points



# DODGE COUNTY

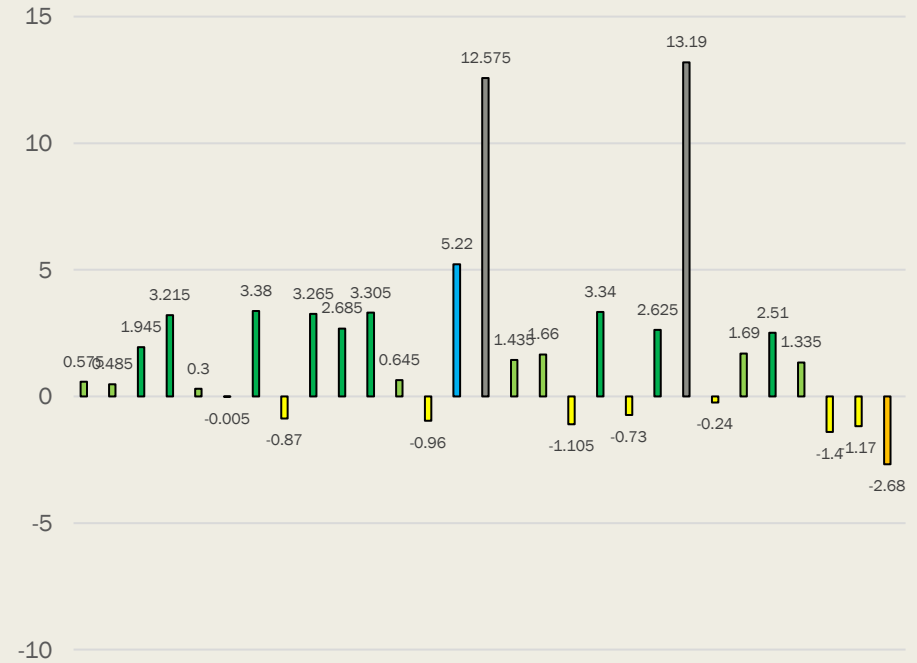
## 29 WELLS: DECREASED AVERAGE OF 2.06' FROM 2020

2021 SWL Compared to 2020



- Increased 2'-4'
- Increased .2'-2'
- Unchanged (+/- 0.2)
- Down .2'-2'
- Down 2'-4'
- Down 4'-6'
- Down > 6'

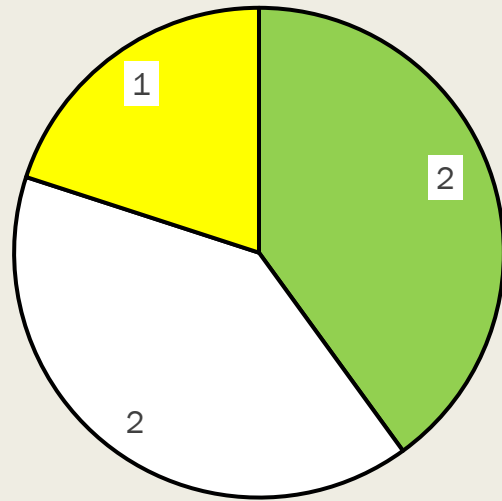
2021 Readings Compared to Historic Mid-Points



# KNOX COUNTY

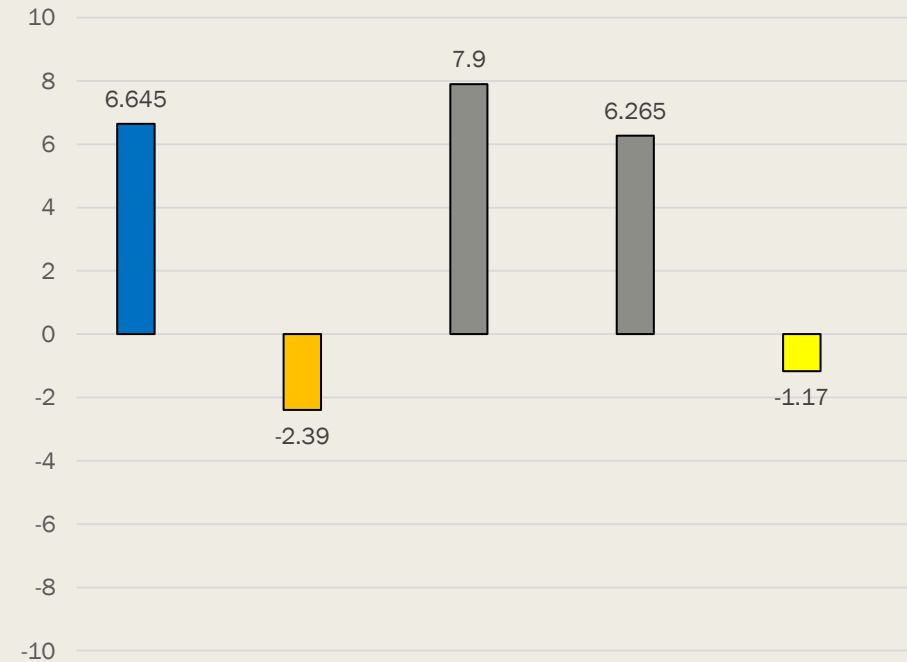
## 5 WELLS: INCREASED AVERAGE OF 0.11' FROM 2020

2021 SWL Compared to 2020



■ Increased .2'-2'   ■ Unchanged (+/- 0.2)   ■ Down .2'-2'

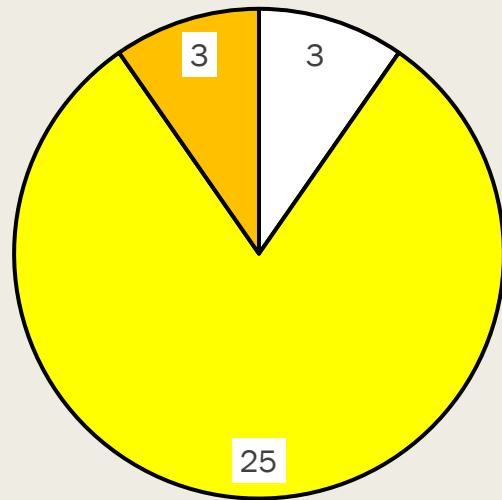
2021 Readings Compared to Historic Mid-Points



# MADISON COUNTY

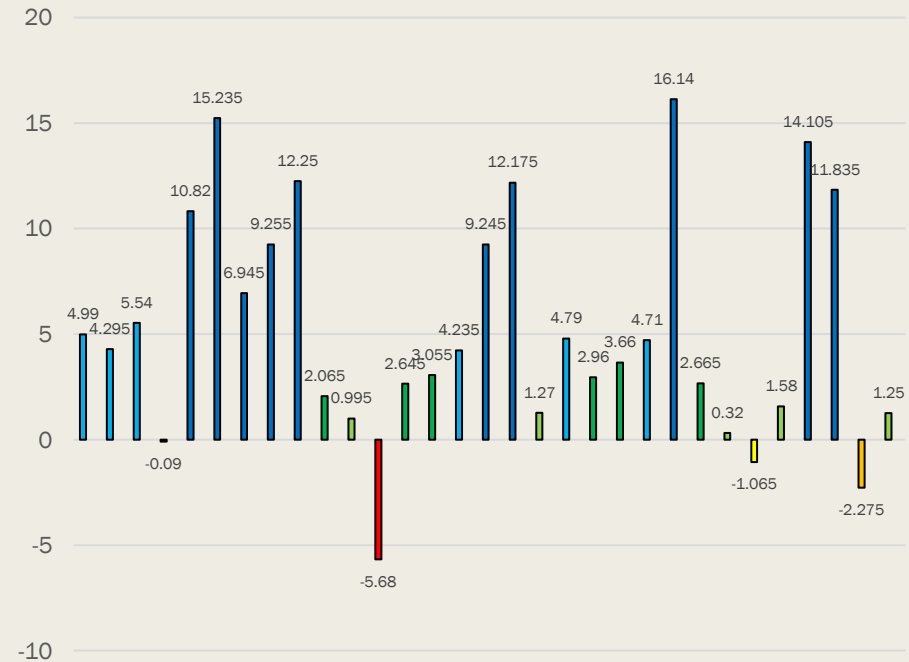
## 31 WELLS: DECREASED AVERAGE OF 1.1' FROM 2020

2021 SWL Compared to 2020



■ Unchanged (+/- 0.2) 
 ■ Down .2'-2' 
 ■ Down 2'-4'

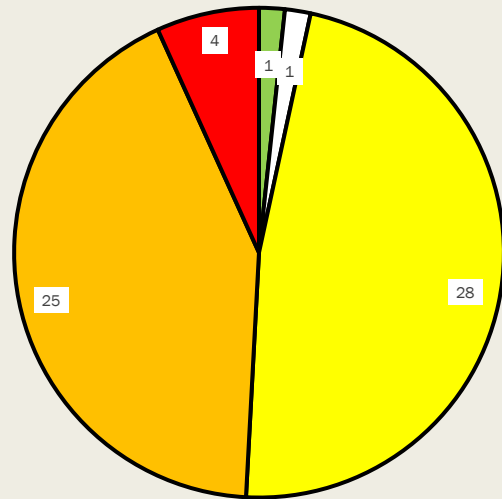
2021 Readings Compared to Historic Mid-Points



# PIERCE COUNTY

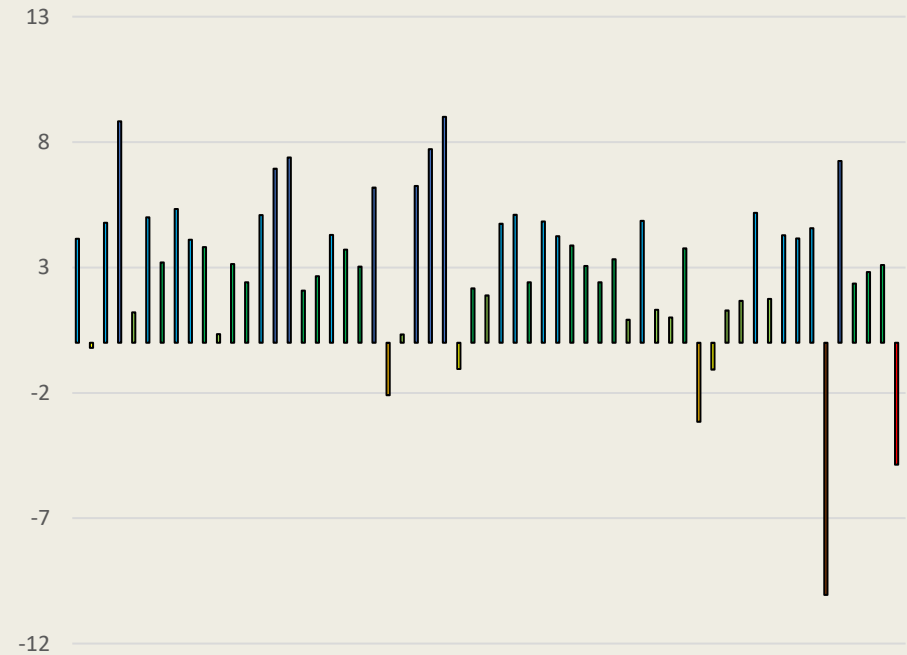
59 WELLS: DECREASED AVERAGE OF 2.04' FROM 2020

2021 SWL Compared to 2020



■ Increased .2'-2' ■ Unchanged (+/- 0.2) ■ Down .2'-2' ■ Down 2'-4' ■ Down 4'-6'

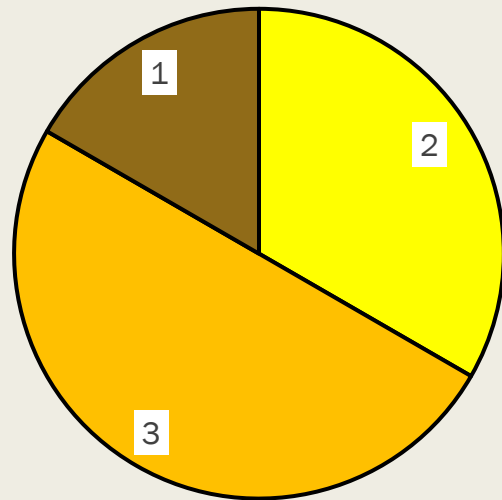
2021 Readings vs Historic Mid-Points



# PLATTE COUNTY

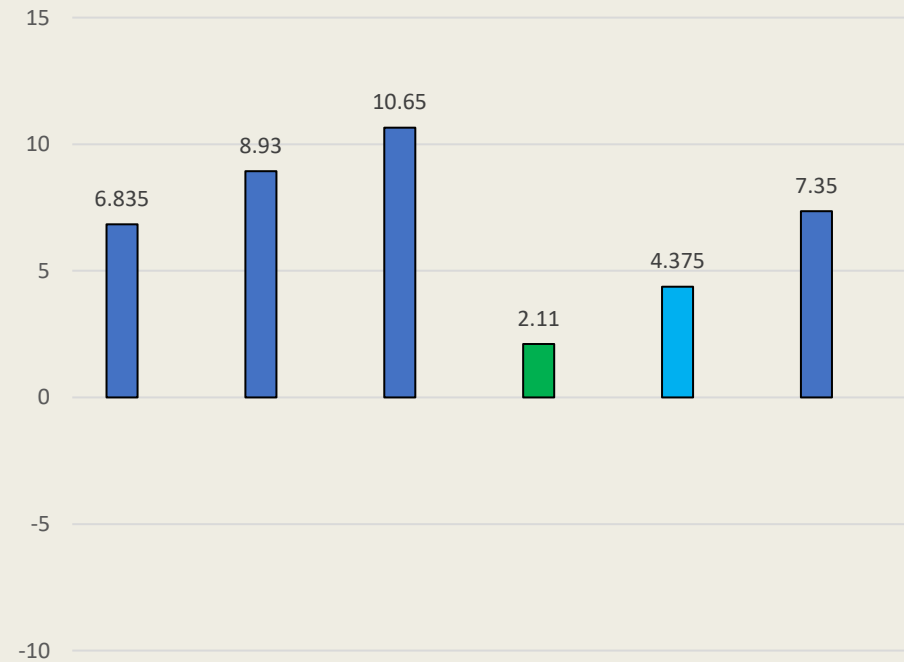
## 6 WELLS: DECREASED AVERAGE OF 3.06' FROM 2020

2021 SWL Compared to 2020



■ Down .2'-2' ■ Down 2'-4' ■ Down > 6'

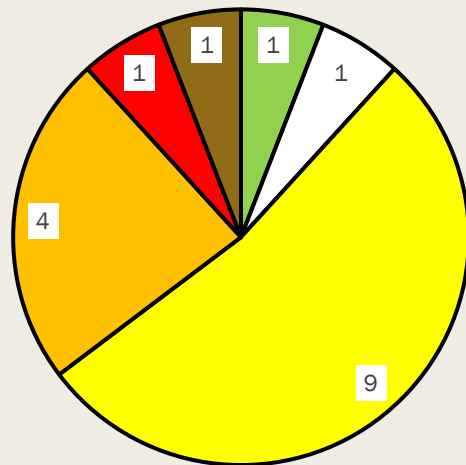
2021 Readings Compared to Historical Mid-Points



# STANTON COUNTY

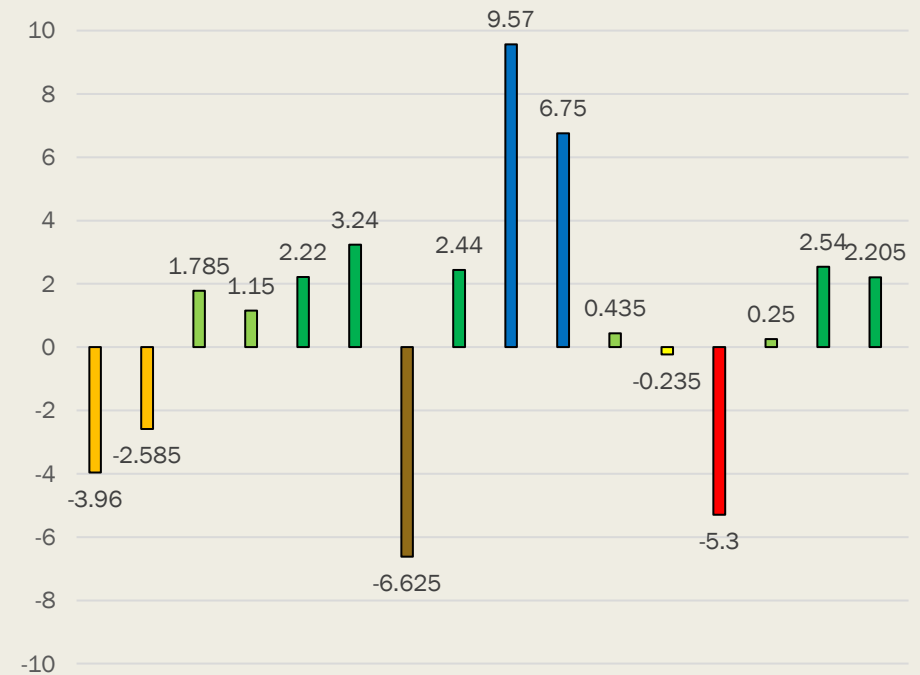
17 WELLS: DECREASED AVERAGE OF 2.07' FROM 2020

2021 SWL Compared to 2020



- Increased .2'-2'
- Unchanged (+/- 0.2)
- Down .2'-2'
- Down 2'-4'
- Down 4'-6'
- Down > 6'

2021 Readings Compared to Historical Mid-Points

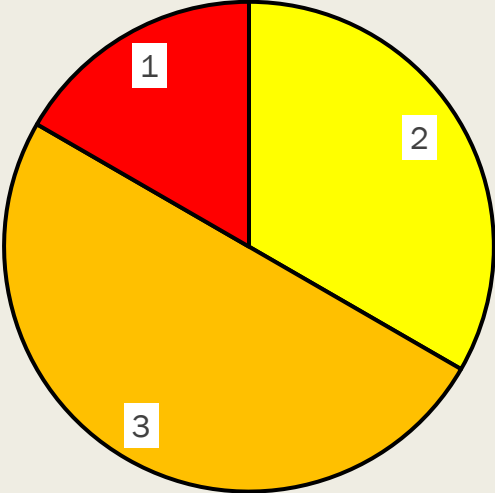




# THURSTON COUNTY

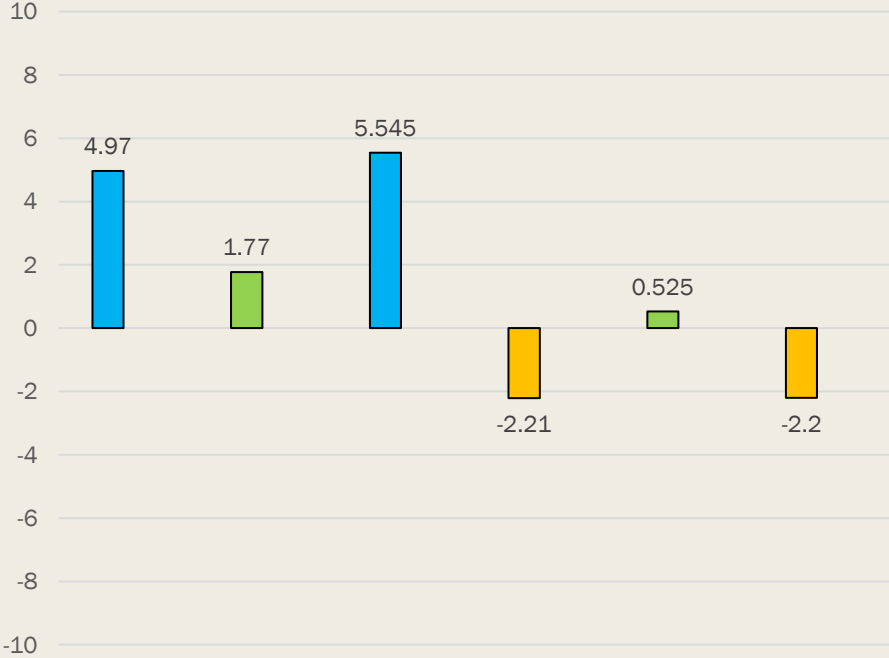
## 6 WELLS: DECREASED AVERAGE OF 2.6' FROM 2020

2021 SWL Compared to 2020



■ Down .2'-2'   ■ Down 2'-4'   ■ Down 4'-6'

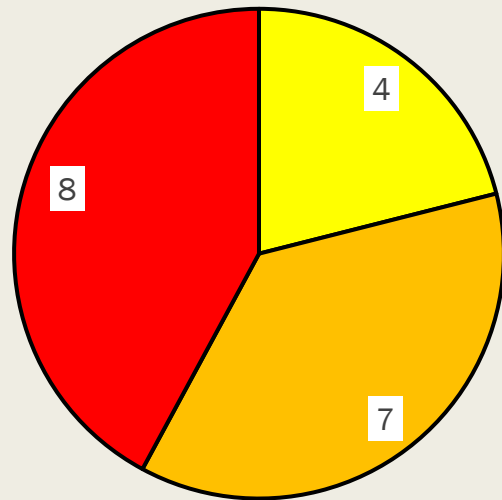
2021 Readings Compared to Historical Mid-Points



# WAYNE COUNTY

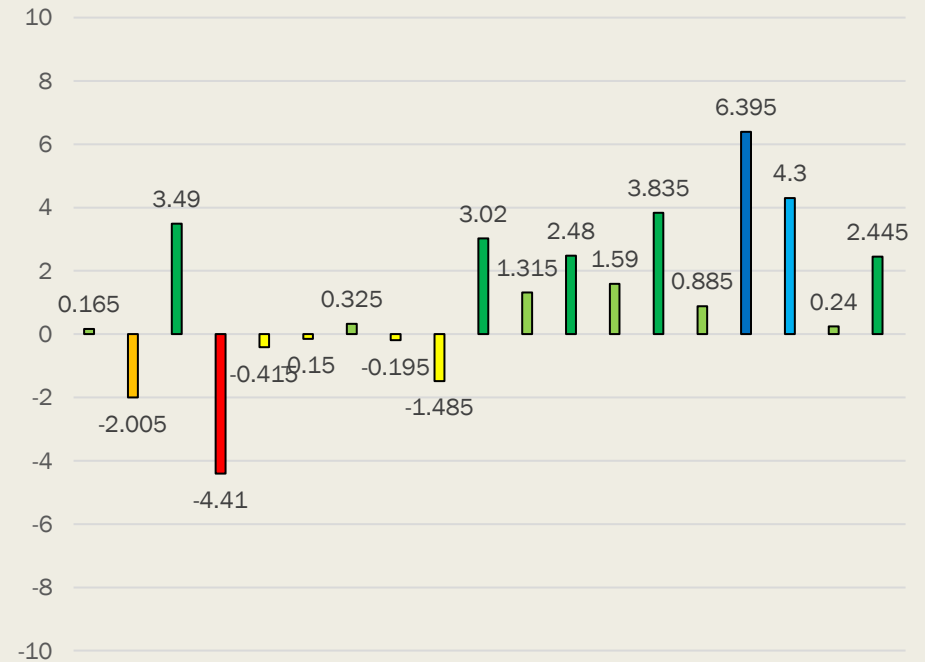
19 WELLS: DECREASED AVERAGE OF 3.35' FROM 2020

2021 SWL Compared to 2020



■ Down .2'-2' ■ Down 2'-4' ■ Down 4'-6'

2021 Readings Compared to Historical Mid-Points



The image features two large, thick black L-shaped brackets. One is positioned in the top-left corner, and the other is in the bottom-right corner. They are oriented towards each other, framing the central text.

**QUESTIONS/COMMENTS**