# WASHINGTON STATE - WEST OF CASCADES
# CIR - CROP IRRIGATION REQUIREMENT and CU - CROP CONSUMPTIVE USE

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APPENDIX B

# WASHINGTON STATE - WEST OF CASCADES
## CIR - CROP IRRIGATION REQUIREMENT and CU - CROP CONSUMPTIVE USE

ABERDEEN 46.97 LATITUDE

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN TEMPERATURE (F) | 40.0 | 42.5 | 44.5 | 48.4 | 53.0 | 57.2 | 60.2 | 60.8 | 58.9 | 52.7 | 45.4 | 41.5 | |
| TOTAL PRECIPITATION (IN) | 12.38 | 9.96 | 9.17 | 5.68 | 3.57 | 2.60 | 1.45 | 1.78 | 3.73 | 7.57 | 11.37 | 13.75 | 83.01 |
| REFERENCE CROP ET (IN) | 0.11 | 0.56 | 1.37 | 2.19 | 3.22 | 3.51 | 3.91 | 3.10 | 2.47 | 1.46 | 0.36 | 0.04 | 22.30 |
| EFFECTIVE PRECIP (IN) | 0.11 | 0.56 | 1.35 | 2.16 | 2.31 | 1.80 | 1.04 | 1.22 | 2.15 | 1.43 | 0.36 | 0.04 | 14.53 |

PASTURE/TURF

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 1/ 2 | 12/31 | 0.00 | 0.00 | 0.00 | 0.00 | 0.75 | 1.54 | 2.67 | 1.72 | 0.19 | 0.00 | 0.00 | 0.00 | 6.88 |
| CU | | | 0.10 | 0.53 | 1.30 | 2.08 | 3.06 | 3.33 | 3.71 | 2.95 | 2.35 | 1.39 | 0.34 | 0.04 | 21.19 |

FIELD CORN

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 6/11 | 10/29 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.52 | 2.02 | 0.56 | 0.00 | 0.00 | 0.00 | 4.10 |
| CU | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.11 | 2.54 | 3.26 | 2.72 | 1.20 | 0.00 | 0.00 | 10.82 |

ANACORTES 48.52 LATITUDE

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN TEMPERATURE (F) | 39.8 | 42.3 | 45.1 | 49.6 | 54.7 | 59.0 | 61.9 | 61.9 | 58.4 | 51.9 | 45.1 | 41.5 | |
| TOTAL PRECIPITATION (IN) | 3.46 | 2.47 | 2.27 | 1.67 | 1.41 | 1.35 | 0.92 | 0.89 | 1.49 | 2.47 | 3.43 | 3.81 | 25.64 |
| REFERENCE CROP ET (IN) | 0.25 | 0.69 | 1.56 | 2.84 | 4.10 | 4.64 | 5.46 | 4.33 | 3.06 | 1.44 | 0.41 | 0.12 | 28.90 |
| EFFECTIVE PRECIP (IN) | 0.25 | 0.69 | 1.23 | 1.13 | 1.02 | 0.99 | 0.70 | 0.64 | 1.03 | 1.22 | 0.41 | 0.12 | 9.42 |

PASTURE/TURF

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 1/ 2 | 12/31 | 0.00 | 0.00 | 0.25 | 1.57 | 2.88 | 3.42 | 4.49 | 3.48 | 1.88 | 0.14 | 0.00 | 0.00 | 18.11 |
| CU | | | 0.24 | 0.66 | 1.48 | 2.70 | 3.89 | 4.41 | 5.19 | 4.11 | 2.91 | 1.37 | 0.39 | 0.11 | 27.46 |

FIELD CORN

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 6/11 | 10/29 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.51 | 2.71 | 3.88 | 2.34 | 0.00 | 0.00 | 0.00 | 9.43 |
| CU | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.35 | 3.39 | 4.50 | 3.37 | 1.18 | 0.00 | 0.00 | 13.79 |

BATTLE GROUND 45.78 LATITUDE

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN TEMPERATURE (F) | 37.9 | 42.0 | 44.7 | 48.8 | 54.4 | 59.7 | 63.6 | 63.8 | 60.0 | 52.1 | 44.5 | 39.6 | |
| TOTAL PRECIPITATION (IN) | 7.12 | 5.53 | 5.40 | 3.67 | 2.87 | 2.35 | 0.87 | 1.35 | 2.46 | 4.43 | 7.34 | 8.01 | 51.40 |
| REFERENCE CROP ET (IN) | 0.11 | 0.72 | 1.60 | 2.99 | 4.47 | 5.04 | 6.16 | 5.15 | 3.56 | 1.64 | 0.47 | 0.07 | 31.98 |
| EFFECTIVE PRECIP (IN) | 0.11 | 0.72 | 1.57 | 2.32 | 2.05 | 1.77 | 0.69 | 1.00 | 1.72 | 1.62 | 0.47 | 0.07 | 14.11 |

PASTURE/TURF

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 2/16 | 12/31 | 0.00 | 0.00 | 0.00 | 0.52 | 2.19 | 3.02 | 5.16 | 3.89 | 1.67 | 0.00 | 0.00 | 0.00 | 16.45 |
| CU | | | 0.00 | 0.29 | 1.52 | 2.84 | 4.25 | 4.79 | 5.85 | 4.89 | 3.38 | 1.56 | 0.45 | 0.07 | 29.89 |

FIELD CORN

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 6/ 4 | 10/22 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.74 | 4.58 | 2.13 | 0.00 | 0.00 | 0.00 | 10.45 |
| CU | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.97 | 4.44 | 5.56 | 3.84 | 1.23 | 0.00 | 0.00 | 17.04 |

# WASHINGTON STATE - WEST OF CASCADES
## CIR - CROP IRRIGATION REQUIREMENT and CU - CROP CONSUMPTIVE USE

BELLINGHAM 48.78 LATITUDE

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN TEMPERATURE (F) | 36.8 | 40.7 | 43.1 | 47.7 | 53.5 | 58.5 | 62.0 | 62.1 | 57.4 | 50.2 | 43.1 | 38.8 | |
| TOTAL PRECIPITATION (IN) | 4.68 | 3.55 | 3.11 | 2.56 | 2.19 | 1.70 | 1.24 | 1.31 | 1.97 | 3.54 | 4.81 | 4.95 | 35.61 |
| REFERENCE CROP ET (IN) | 0.10 | 0.60 | 1.41 | 2.66 | 3.97 | 4.60 | 5.49 | 4.36 | 2.97 | 1.33 | 0.32 | 0.00 | 27.82 |
| EFFECTIVE PRECIP (IN) | 0.10 | 0.60 | 1.34 | 1.67 | 1.56 | 1.23 | 0.93 | 0.95 | 1.34 | 1.30 | 0.32 | 0.00 | 11.33 |

PASTURE/TURF

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 3/ 3 | 12/ 7 | 0.00 | 0.00 | 0.00 | 0.86 | 2.21 | 3.14 | 4.29 | 3.19 | 1.49 | 0.00 | 0.00 | 0.00 | 15.19 |
| CU | | | 0.00 | 0.00 | 1.21 | 2.53 | 3.77 | 4.37 | 5.22 | 4.14 | 2.82 | 1.26 | 0.30 | 0.00 | 25.62 |

FIELD CORN

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 6/11 | 10/29 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.28 | 2.50 | 3.60 | 1.93 | 0.00 | 0.00 | 0.00 | 8.31 |
| CU | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.34 | 3.40 | 4.53 | 3.27 | 1.02 | 0.00 | 0.00 | 13.57 |

BLAINE 49.00 LATITUDE

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN TEMPERATURE (F) | 36.2 | 40.3 | 43.0 | 47.8 | 53.7 | 58.7 | 61.7 | 61.5 | 56.9 | 49.6 | 42.6 | 38.2 | |
| TOTAL PRECIPITATION (IN) | 5.35 | 4.34 | 3.60 | 2.63 | 2.20 | 1.81 | 1.25 | 1.58 | 2.20 | 3.93 | 5.82 | 6.02 | 40.73 |
| REFERENCE CROP ET (IN) | 0.06 | 0.57 | 1.41 | 2.68 | 4.00 | 4.63 | 5.47 | 4.31 | 2.93 | 1.29 | 0.29 | 0.00 | 27.64 |
| EFFECTIVE PRECIP (IN) | 0.06 | 0.57 | 1.38 | 1.71 | 1.57 | 1.30 | 0.93 | 1.14 | 1.48 | 1.26 | 0.29 | 0.00 | 11.71 |

PASTURE/TURF

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 3/ 7 | 12/31 | 0.00 | 0.00 | 0.00 | 0.84 | 2.23 | 3.10 | 4.26 | 2.95 | 1.31 | 0.00 | 0.00 | 0.00 | 14.69 |
| CU | | | 0.00 | 0.00 | 1.04 | 2.55 | 3.80 | 4.40 | 5.20 | 4.09 | 2.78 | 1.23 | 0.28 | 0.00 | 25.36 |

FIELD CORN

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 6/11 | 10/29 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.21 | 2.48 | 3.35 | 1.75 | 0.00 | 0.00 | 0.00 | 7.79 |
| CU | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.35 | 3.39 | 4.48 | 3.22 | 1.06 | 0.00 | 0.00 | 13.50 |

BREMERTON 47.57 LATITUDE

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN TEMPERATURE (F) | 39.0 | 41.9 | 44.5 | 49.1 | 55.1 | 59.9 | 63.7 | 64.2 | 59.8 | 52.3 | 44.3 | 40.1 | |
| TOTAL PRECIPITATION (IN) | 7.72 | 6.08 | 5.51 | 2.89 | 1.91 | 1.43 | 0.80 | 0.95 | 1.98 | 4.22 | 7.84 | 8.48 | 49.81 |
| REFERENCE CROP ET (IN) | 0.12 | 0.69 | 1.58 | 3.05 | 4.63 | 5.16 | 6.29 | 5.26 | 3.56 | 1.63 | 0.42 | 0.04 | 32.43 |
| EFFECTIVE PRECIP (IN) | 0.12 | 0.69 | 1.56 | 1.90 | 1.37 | 1.06 | 0.64 | 0.71 | 1.37 | 1.60 | 0.42 | 0.04 | 11.49 |

PASTURE/TURF

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 2/18 | 12/31 | 0.00 | 0.00 | 0.00 | 1.00 | 3.03 | 3.84 | 5.33 | 4.29 | 2.00 | 0.00 | 0.00 | 0.00 | 19.49 |
| CU | | | 0.00 | 0.23 | 1.50 | 2.90 | 4.40 | 4.90 | 5.98 | 5.00 | 3.38 | 1.55 | 0.40 | 0.04 | 30.27 |

FIELD CORN

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 6/ 4 | 10/22 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.77 | 3.87 | 4.99 | 2.47 | 0.00 | 0.00 | 0.00 | 12.09 |
| CU | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.01 | 4.53 | 5.68 | 3.84 | 0.87 | 0.00 | 0.00 | 16.93 |

# WASHINGTON STATE - WEST OF CASCADES
## CIR - CROP IRRIGATION REQUIREMENT and CU - CROP CONSUMPTIVE US

BUCKLEY 47.17 LATITUDE

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN TEMPERATURE (F) | 38.2 | 41.2 | 44.1 | 48.6 | 54.3 | 59.0 | 63.1 | 63.1 | 58.5 | 50.8 | 43.2 | 39.4 | |
| TOTAL PRECIPITATION (IN) | 5.89 | 4.74 | 4.72 | 3.90 | 3.17 | 3.06 | 1.35 | 1.65 | 2.81 | 4.49 | 6.34 | 6.60 | 48.72 |
| REFERENCE CROP ET (IN) | 0.05 | 0.55 | 1.25 | 2.75 | 4.02 | 4.74 | 5.91 | 4.57 | 3.60 | 1.48 | 0.27 | 0.00 | 29.19 |
| EFFECTIVE PRECIP (IN) | 0.05 | 0.55 | 1.23 | 2.33 | 2.17 | 2.18 | 1.01 | 1.20 | 1.92 | 1.45 | 0.27 | 0.00 | 14.37 |

PASTURE/TURF

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 2/24 | 12/31 | 0.00 | 0.00 | 0.00 | 0.28 | 1.64 | 2.32 | 4.61 | 3.15 | 1.50 | 0.00 | 0.00 | 0.00 | 13.49 |
| CU | | | 0.00 | 0.07 | 1.19 | 2.61 | 3.82 | 4.50 | 5.61 | 4.34 | 3.42 | 1.41 | 0.26 | 0.00 | 27.24 |

FIELD CORN

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 5/29 | 10/16 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.19 | 3.91 | 3.83 | 1.82 | 0.00 | 0.00 | 0.00 | 9.75 |
| CU | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.13 | 2.37 | 4.91 | 5.03 | 3.74 | 1.04 | 0.00 | 0.00 | 17.21 |

CENTRALIA 46.72 LATITUDE

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN TEMPERATURE (F) | 39.3 | 42.4 | 45.5 | 50.3 | 56.0 | 60.7 | 64.9 | 64.8 | 60.5 | 52.7 | 44.9 | 40.9 | |
| TOTAL PRECIPITATION (IN) | 6.60 | 5.26 | 4.76 | 2.92 | 2.06 | 1.88 | 0.80 | 1.16 | 2.07 | 4.23 | 6.80 | 7.51 | 46.05 |
| REFERENCE CROP ET (IN) | 0.11 | 0.61 | 1.34 | 2.90 | 4.19 | 4.91 | 6.11 | 4.73 | 3.79 | 1.61 | 0.35 | 0.00 | 30.6[illegible] |
| EFFECTIVE PRECIP (IN) | 0.11 | 0.61 | 1.32 | 1.90 | 1.47 | 1.36 | 0.64 | 0.85 | 1.45 | 1.58 | 0.35 | 0.00 | 11.[illegible] |

PASTURE/TURF

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 2/11 | 12/31 | 0.00 | 0.00 | 0.00 | 0.86 | 2.51 | 3.31 | 5.17 | 3.65 | 2.15 | 0.00 | 0.00 | 0.00 | 17.65 |
| CU | | | 0.00 | 0.35 | 1.27 | 2.76 | 3.98 | 4.66 | 5.80 | 4.49 | 3.60 | 1.53 | 0.33 | 0.00 | 28.79 |

FIELD CORN

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 5/29 | 10/16 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.07 | 4.44 | 4.36 | 2.49 | 0.00 | 0.00 | 0.00 | 12.36 |
| CU | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.13 | 2.46 | 5.07 | 5.20 | 3.94 | 1.13 | 0.00 | 0.00 | 17.93 |

CLEARBROOK 48.97 LATITUDE

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN TEMPERATURE (F) | 35.5 | 39.5 | 43.4 | 48.5 | 54.2 | 58.9 | 62.3 | 62.0 | 57.6 | 50.2 | 42.2 | 37.7 | |
| TOTAL PRECIPITATION (IN) | 5.45 | 4.49 | 4.27 | 3.33 | 2.85 | 2.50 | 1.63 | 1.70 | 2.99 | 4.85 | 5.79 | 6.28 | 46.13 |
| REFERENCE CROP ET (IN) | 0.03 | 0.53 | 1.44 | 2.74 | 4.06 | 4.65 | 5.54 | 4.36 | 2.99 | 1.32 | 0.28 | 0.00 | 27.94 |
| EFFECTIVE PRECIP (IN) | 0.03 | 0.53 | 1.41 | 2.08 | 2.00 | 1.88 | 1.21 | 1.22 | 1.95 | 1.30 | 0.28 | 0.00 | 13.89 |

PASTURE/TURF

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 3/ 7 | 12/16 | 0.00 | 0.00 | 0.00 | 0.53 | 1.86 | 2.54 | 4.05 | 2.92 | 0.89 | 0.00 | 0.00 | 0.00 | 12.79 |
| CU | | | 0.00 | 0.00 | 1.06 | 2.60 | 3.86 | 4.42 | 5.26 | 4.14 | 2.84 | 1.25 | 0.27 | 0.00 | 25.70 |

FIELD CORN

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEAS[illegible] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 6/11 | 10/29 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.24 | 3.32 | 1.34 | 0.00 | 0.00 | 0.00 | 6.[illegible] |
| CU | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.35 | 3.43 | 4.53 | 3.29 | 1.08 | 0.00 | 0.00 | 13.70 |

# WASHINGTON STATE - WEST OF CASCADES
## CIR - CROP IRRIGATION REQUIREMENT and CU - CROP CONSUMPTIVE USE

CONCRETE 48.55 LATITUDE

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN TEMPERATURE (F) | 36.5 | 40.1 | 44.0 | 49.9 | 56.1 | 60.5 | 64.5 | 64.7 | 60.4 | 52.5 | 43.2 | 38.4 | |
| TOTAL PRECIPITATION (IN) | 9.30 | 7.16 | 6.84 | 4.48 | 3.18 | 2.65 | 1.55 | 1.66 | 3.66 | 6.61 | 9.68 | 10.52 | 67.29 |
| REFERENCE CROP ET (IN) | 0.00 | 0.34 | 1.14 | 2.31 | 4.10 | 4.75 | 6.63 | 5.32 | 4.38 | 1.58 | 0.22 | 0.00 | 30.78 |
| EFFECTIVE PRECIP (IN) | 0.00 | 0.34 | 1.12 | 2.22 | 2.19 | 1.96 | 1.21 | 1.23 | 2.55 | 1.55 | 0.22 | 0.00 | 14.59 |

PASTURE/TURF

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 3/ 3 | 11/23 | 0.00 | 0.00 | 0.00 | 0.00 | 1.71 | 2.55 | 5.09 | 3.82 | 1.61 | 0.00 | 0.00 | 0.00 | 14.79 |
| CU | | | 0.00 | 0.00 | 0.98 | 2.19 | 3.89 | 4.51 | 6.30 | 5.05 | 4.16 | 1.50 | 0.16 | 0.00 | 28.75 |

FIELD CORN

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 6/25 | 10/ 7 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.05 | 3.47 | 2.27 | 0.00 | 0.00 | 0.00 | 7.78 |
| CU | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.36 | 3.25 | 4.68 | 4.82 | 0.38 | 0.00 | 0.00 | 13.49 |

COUPEVILLE 48.20 LATITUDE

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN TEMPERATURE (F) | 38.5 | 41.6 | 44.0 | 47.9 | 53.1 | 57.4 | 60.5 | 61.0 | 57.0 | 50.0 | 43.7 | 40.2 | |
| TOTAL PRECIPITATION (IN) | 2.44 | 1.80 | 1.78 | 1.56 | 1.49 | 1.25 | 0.80 | 0.93 | 1.32 | 1.67 | 2.45 | 2.82 | 20.31 |
| REFERENCE CROP ET (IN) | 0.20 | 0.65 | 1.48 | 2.67 | 3.90 | 4.45 | 5.27 | 4.23 | 2.94 | 1.32 | 0.36 | 0.07 | 27.55 |
| EFFECTIVE PRECIP (IN) | 0.20 | 0.59 | 1.03 | 1.04 | 1.07 | 0.91 | 0.60 | 0.66 | 0.90 | 0.96 | 0.36 | 0.07 | 8.40 |

PASTURE/TURF

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 2/21 | 12/31 | 0.00 | 0.00 | 0.38 | 1.50 | 2.64 | 3.32 | 4.40 | 3.35 | 1.89 | 0.29 | 0.00 | 0.00 | 17.77 |
| CU | | | 0.00 | 0.15 | 1.41 | 2.54 | 3.70 | 4.23 | 5.01 | 4.02 | 2.79 | 1.25 | 0.34 | 0.07 | 25.51 |

FIELD CORN

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 6/11 | 10/29 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.53 | 2.71 | 3.74 | 2.33 | 0.00 | 0.00 | 0.00 | 9.31 |
| CU | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.32 | 3.32 | 4.40 | 3.23 | 1.08 | 0.00 | 0.00 | 13.36 |

ELMA 47.00 LATITUDE

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN TEMPERATURE (F) | 39.0 | 42.5 | 44.6 | 49.0 | 54.8 | 59.6 | 63.2 | 63.8 | 59.9 | 52.5 | 44.7 | 40.6 | |
| TOTAL PRECIPITATION (IN) | 10.18 | 8.15 | 7.37 | 4.63 | 2.67 | 2.04 | 1.12 | 1.48 | 2.99 | 6.18 | 9.79 | 10.62 | 67.22 |
| REFERENCE CROP ET (IN) | 0.07 | 0.55 | 1.38 | 2.24 | 3.40 | 3.73 | 4.20 | 3.34 | 2.54 | 1.44 | 0.33 | 0.01 | 23.24 |
| EFFECTIVE PRECIP (IN) | 0.07 | 0.55 | 1.36 | 2.18 | 1.82 | 1.43 | 0.80 | 1.03 | 1.89 | 1.42 | 0.33 | 0.01 | 12.89 |

PASTURE/TURF

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 2/11 | 12/31 | 0.00 | 0.00 | 0.00 | 0.00 | 1.41 | 2.12 | 3.18 | 2.14 | 0.52 | 0.00 | 0.00 | 0.00 | 9.38 |
| CU | | | 0.00 | 0.32 | 1.31 | 2.13 | 3.23 | 3.54 | 3.99 | 3.17 | 2.41 | 1.37 | 0.31 | 0.01 | 21.80 |

FIELD CORN

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 6/11 | 10/29 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.92 | 2.46 | 0.90 | 0.00 | 0.00 | 0.00 | 5.28 |
| CU | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.18 | 2.73 | 3.51 | 2.79 | 1.18 | 0.00 | 0.00 | 11.39 |

# WASHINGTON STATE - WEST OF CASCADES
## CIR - CROP IRRIGATION REQUIREMENT and CU - CROP CONSUMPTIVE USE

EVERETT 47.98 LATITUDE

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN TEMPERATURE (F) | 38.4 | 41.7 | 44.3 | 48.7 | 54.3 | 59.4 | 62.8 | 62.8 | 58.2 | 51.1 | 44.0 | 40.1 | |
| TOTAL PRECIPITATION (IN) | 4.58 | 3.49 | 3.59 | 2.60 | 2.29 | 2.13 | 1.20 | 1.46 | 2.14 | 3.33 | 4.80 | 5.10 | 36.71 |
| REFERENCE CROP ET (IN) | 0.20 | 0.66 | 1.50 | 2.74 | 4.03 | 4.66 | 5.54 | 4.41 | 3.04 | 1.39 | 0.38 | 0.08 | 28.63 |
| EFFECTIVE PRECIP (IN) | 0.20 | 0.66 | 1.48 | 1.70 | 1.64 | 1.55 | 0.90 | 1.06 | 1.45 | 1.35 | 0.38 | 0.08 | 12.44 |

PASTURE/TURF

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 2/19 | 12/31 | 0.00 | 0.00 | 0.00 | 0.91 | 2.18 | 2.88 | 4.36 | 3.12 | 1.44 | 0.00 | 0.00 | 0.00 | 14.89 |
| CU | | | 0.00 | 0.20 | 1.43 | 2.60 | 3.83 | 4.43 | 5.26 | 4.19 | 2.89 | 1.32 | 0.36 | 0.08 | 26.58 |

FIELD CORN

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 6/11 | 10/29 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 2.55 | 3.53 | 1.89 | 0.00 | 0.00 | 0.00 | 7.99 |
| CU | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.36 | 3.43 | 4.59 | 3.34 | 1.14 | 0.00 | 0.00 | 13.86 |

GRAPEVIEW 47.30 LATITUDE

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN TEMPERATURE (F) | 39.2 | 42.3 | 44.9 | 49.3 | 55.5 | 60.3 | 64.0 | 64.4 | 59.7 | 52.0 | 44.9 | 40.9 | |
| TOTAL PRECIPITATION (IN) | 7.97 | 6.53 | 5.49 | 3.31 | 1.97 | 1.50 | 0.92 | 1.16 | 2.30 | 4.80 | 8.22 | 8.51 | 52.68 |
| REFERENCE CROP ET (IN) | 0.13 | 0.72 | 1.61 | 3.07 | 4.67 | 5.19 | 6.31 | 5.27 | 3.54 | 1.61 | 0.46 | 0.08 | 32.67 |
| EFFECTIVE PRECIP (IN) | 0.13 | 0.72 | 1.59 | 2.14 | 1.41 | 1.11 | 0.73 | 0.86 | 1.60 | 1.59 | 0.46 | 0.08 | 12.41 |

PASTURE/TURF

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 2/13 | 12/31 | 0.00 | 0.00 | 0.00 | 0.78 | 3.02 | 3.82 | 5.27 | 4.15 | 1.76 | 0.00 | 0.00 | 0.00 | 18.80 |
| CU | | | 0.00 | 0.37 | 1.53 | 2.92 | 4.44 | 4.93 | 5.99 | 5.01 | 3.36 | 1.53 | 0.44 | 0.08 | 30.59 |

FIELD CORN

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 6/ 4 | 10/22 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.71 | 3.79 | 4.85 | 2.23 | 0.00 | 0.00 | 0.00 | 11.58 |
| CU | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.02 | 4.54 | 5.69 | 3.82 | 0.86 | 0.00 | 0.00 | 16.94 |

GRAYLAND 46.80 LATITUDE

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN TEMPERATURE (F) | 41.5 | 43.7 | 44.9 | 47.7 | 51.7 | 55.4 | 57.6 | 58.2 | 57.1 | 52.2 | 46.3 | 42.3 | |
| TOTAL PRECIPITATION (IN) | 10.01 | 8.37 | 8.13 | 5.05 | 3.30 | 2.37 | 1.48 | 1.79 | 3.53 | 7.11 | 10.50 | 10.71 | 72.35 |
| REFERENCE CROP ET (IN) | 0.18 | 0.62 | 1.40 | 2.13 | 3.09 | 3.34 | 3.65 | 2.88 | 2.33 | 1.43 | 0.40 | 0.08 | 21.54 |
| EFFECTIVE PRECIP (IN) | 0.18 | 0.62 | 1.38 | 2.10 | 2.13 | 1.63 | 1.05 | 1.21 | 2.06 | 1.40 | 0.40 | 0.08 | 14.25 |

PASTURE/TURF

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 1/ 2 | 12/31 | 0.00 | 0.00 | 0.00 | 0.00 | 0.80 | 1.54 | 2.42 | 1.53 | 0.16 | 0.00 | 0.00 | 0.00 | 6.45 |
| CU | | | 0.17 | 0.59 | 1.33 | 2.02 | 2.94 | 3.17 | 3.47 | 2.74 | 2.21 | 1.36 | 0.38 | 0.08 | 20.45 |

FIELD CORN

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 6/11 | 10/29 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.36 | 1.81 | 0.50 | 0.00 | 0.00 | 0.00 | 3.67 |
| CU | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.08 | 2.41 | 3.02 | 2.56 | 1.10 | 0.00 | 0.00 | 10.17 |

# WASHINGTON STATE - WEST OF CASCADES
## CIR - CROP IRRIGATION REQUIREMENT and CU - CROP CONSUMPTIVE USE

GRAYS RIVER 46.37 LATITUDE

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN TEMPERATURE (F) | 39.5 | 42.3 | 44.3 | 47.3 | 52.5 | 57.1 | 60.8 | 61.3 | 58.2 | 51.4 | 44.6 | 40.4 | |
| TOTAL PRECIPITATION (IN) | 16.39 | 12.68 | 11.85 | 7.42 | 4.99 | 3.49 | 2.15 | 2.57 | 4.98 | 9.30 | 16.17 | 17.64 | 109.63 |
| REFERENCE CROP ET (IN) | 0.11 | 0.55 | 1.36 | 2.09 | 3.15 | 3.48 | 3.94 | 3.12 | 2.41 | 1.38 | 0.34 | 0.02 | 21.96 |
| EFFECTIVE PRECIP (IN) | 0.11 | 0.55 | 1.34 | 2.06 | 2.99 | 2.29 | 1.53 | 1.73 | 2.37 | 1.36 | 0.34 | 0.02 | 16.67 |

PASTURE/TURF

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 2/13 | 12/31 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 1.01 | 2.22 | 1.24 | 0.00 | 0.00 | 0.00 | 0.00 | 4.48 |
| CU | | | 0.00 | 0.28 | 1.29 | 1.99 | 2.99 | 3.31 | 3.74 | 2.96 | 2.29 | 1.31 | 0.32 | 0.02 | 20.51 |

FIELD CORN

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 6/11 | 10/29 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.06 | 1.54 | 0.28 | 0.00 | 0.00 | 0.00 | 2.88 |
| CU | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.12 | 2.60 | 3.28 | 2.65 | 1.06 | 0.00 | 0.00 | 10.71 |

HOQUIAM 46.97 LATITUDE

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN TEMPERATURE (F) | 41.1 | 43.5 | 45.0 | 48.2 | 52.9 | 56.9 | 59.8 | 60.7 | 59.1 | 53.0 | 46.1 | 42.0 | |
| TOTAL PRECIPITATION (IN) | 9.84 | 8.13 | 7.62 | 4.73 | 3.13 | 2.24 | 1.33 | 1.55 | 3.52 | 6.47 | 10.29 | 10.78 | 69.63 |
| REFERENCE CROP ET (IN) | 0.16 | 0.60 | 1.41 | 2.17 | 3.21 | 3.48 | 3.87 | 3.09 | 2.48 | 1.48 | 0.39 | 0.06 | 22.42 |
| EFFECTIVE PRECIP (IN) | 0.16 | 0.60 | 1.39 | 2.13 | 2.06 | 1.55 | 0.95 | 1.07 | 2.10 | 1.45 | 0.39 | 0.06 | 13.91 |

PASTURE/TURF

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 1/ 2 | 12/31 | 0.00 | 0.00 | 0.00 | 0.00 | 1.00 | 1.76 | 2.73 | 1.87 | 0.26 | 0.00 | 0.00 | 0.00 | 7.60 |
| CU | | | 0.15 | 0.57 | 1.34 | 2.06 | 3.05 | 3.31 | 3.68 | 2.94 | 2.36 | 1.41 | 0.37 | 0.06 | 21.28 |

FIELD CORN

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 6/11 | 10/29 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.59 | 2.17 | 0.63 | 0.00 | 0.00 | 0.00 | 4.38 |
| CU | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.12 | 2.55 | 3.24 | 2.73 | 1.21 | 0.00 | 0.00 | 10.86 |

LONG BEACH 46.37 LATITUDE

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN TEMPERATURE (F) | 41.5 | 43.7 | 45.5 | 47.5 | 51.7 | 55.5 | 58.0 | 58.5 | 56.8 | 51.4 | 46.3 | 42.4 | |
| TOTAL PRECIPITATION (IN) | 10.99 | 9.65 | 9.38 | 5.57 | 3.96 | 2.96 | 1.84 | 1.79 | 4.43 | 6.92 | 11.23 | 13.16 | 81.88 |
| REFERENCE CROP ET (IN) | 0.19 | 0.62 | 1.45 | 2.11 | 3.07 | 3.33 | 3.67 | 2.90 | 2.31 | 1.38 | 0.41 | 0.10 | 21.55 |
| EFFECTIVE PRECIP (IN) | 0.19 | 0.62 | 1.42 | 2.07 | 2.51 | 1.97 | 1.29 | 1.21 | 2.21 | 1.36 | 0.41 | 0.10 | 15.38 |

PASTURE/TURF

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 1/ 2 | 12/31 | 0.00 | 0.00 | 0.00 | 0.00 | 0.41 | 1.19 | 2.20 | 1.54 | 0.00 | 0.00 | 0.00 | 0.00 | 5.34 |
| CU | | | 0.18 | 0.59 | 1.38 | 2.00 | 2.92 | 3.16 | 3.49 | 2.76 | 2.19 | 1.31 | 0.39 | 0.10 | 20.46 |

FIELD CORN

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 6/11 | 10/29 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.14 | 1.82 | 0.33 | 0.00 | 0.00 | 0.00 | 3.29 |
| CU | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.08 | 2.42 | 3.05 | 2.54 | 1.06 | 0.00 | 0.00 | 10.14 |

# WASHINGTON STATE - WEST OF CASCADES
## CIR - CROP IRRIGATION REQUIREMENT and CU - CROP CONSUMPTIVE USE

LONGVIEW 46.17 LATITUDE

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN TEMPERATURE (F) | 38.6 | 42.0 | 45.2 | 49.6 | 55.0 | 59.8 | 64.0 | 64.4 | 60.7 | 53.1 | 44.8 | 40.4 | |
| TOTAL PRECIPITATION (IN) | 6.16 | 4.83 | 4.70 | 3.06 | 2.41 | 2.09 | 0.90 | 1.35 | 2.22 | 4.05 | 6.47 | 7.32 | 45.56 |
| REFERENCE CROP ET (IN) | 0.13 | 0.71 | 1.64 | 3.07 | 4.56 | 5.07 | 6.24 | 5.23 | 3.63 | 1.70 | 0.48 | 0.09 | 32.56 |
| EFFECTIVE PRECIP (IN) | 0.13 | 0.71 | 1.61 | 2.00 | 1.79 | 1.53 | 0.71 | 1.00 | 1.55 | 1.68 | 0.48 | 0.09 | 13.29 |

PASTURE/TURF

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 2/16 | 12/31 | 0.00 | 0.00 | 0.00 | 0.92 | 2.54 | 3.29 | 5.21 | 3.97 | 1.90 | 0.00 | 0.00 | 0.00 | 17.83 |
| CU | | | 0.00 | 0.29 | 1.56 | 2.92 | 4.33 | 4.82 | 5.93 | 4.97 | 3.45 | 1.62 | 0.46 | 0.09 | 30.41 |

FIELD CORN

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 6/ 4 | 10/22 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.17 | 3.77 | 4.67 | 2.37 | 0.00 | 0.00 | 0.00 | 10.98 |
| CU | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.98 | 4.49 | 5.65 | 3.92 | 1.28 | 0.00 | 0.00 | 17.31 |

MONROE 47.85 LATITUDE

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN TEMPERATURE (F) | 38.4 | 42.0 | 44.7 | 49.5 | 55.4 | 60.5 | 64.0 | 64.2 | 59.6 | 52.0 | 44.1 | 39.8 | |
| TOTAL PRECIPITATION (IN) | 6.44 | 4.92 | 4.80 | 3.50 | 2.93 | 2.40 | 1.38 | 1.78 | 2.92 | 4.37 | 6.43 | 6.67 | 48.54 |
| REFERENCE CROP ET (IN) | 0.20 | 0.68 | 1.53 | 2.82 | 4.15 | 4.78 | 5.67 | 4.54 | 3.16 | 1.45 | 0.39 | 0.07 | 29.44 |
| EFFECTIVE PRECIP (IN) | 0.20 | 0.68 | 1.51 | 2.18 | 2.05 | 1.80 | 1.03 | 1.28 | 1.93 | 1.43 | 0.39 | 0.07 | 14.54 |

PASTURE/TURF

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 2/16 | 12/31 | 0.00 | 0.00 | 0.00 | 0.49 | 1.89 | 2.74 | 4.36 | 3.04 | 1.07 | 0.00 | 0.00 | 0.00 | 13.59 |
| CU | | | 0.00 | 0.28 | 1.45 | 2.68 | 3.94 | 4.54 | 5.39 | 4.31 | 3.00 | 1.38 | 0.37 | 0.07 | 27.41 |

FIELD CORN

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 6/11 | 10/29 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.49 | 3.45 | 1.54 | 0.00 | 0.00 | 0.00 | 7.49 |
| CU | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.39 | 3.52 | 4.72 | 3.48 | 1.19 | 0.00 | 0.00 | 14.29 |

MOUNT VERNON 48.50 LATITUDE

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN TEMPERATURE (F) | 38.8 | 42.0 | 44.6 | 48.3 | 53.9 | 58.5 | 61.6 | 61.9 | 57.4 | 50.6 | 43.8 | 40.1 | |
| TOTAL PRECIPITATION (IN) | 4.08 | 2.96 | 2.72 | 2.47 | 2.09 | 1.71 | 1.15 | 1.37 | 2.06 | 3.06 | 3.99 | 4.23 | 31.89 |
| REFERENCE CROP ET (IN) | 0.20 | 0.67 | 1.53 | 2.72 | 4.01 | 4.58 | 5.42 | 4.33 | 2.97 | 1.36 | 0.36 | 0.06 | 28.21 |
| EFFECTIVE PRECIP (IN) | 0.20 | 0.67 | 1.35 | 1.62 | 1.48 | 1.24 | 0.86 | 0.99 | 1.39 | 1.29 | 0.36 | 0.06 | 11.51 |

PASTURE/TURF

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 2/16 | 12/31 | 0.00 | 0.00 | 0.10 | 0.96 | 2.32 | 3.12 | 4.29 | 3.12 | 1.43 | 0.00 | 0.00 | 0.00 | 15.35 |
| CU | | | 0.00 | 0.27 | 1.45 | 2.58 | 3.81 | 4.35 | 5.15 | 4.11 | 2.82 | 1.29 | 0.34 | 0.06 | 26.25 |

FIELD CORN

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 6/11 | 10/29 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.27 | 2.53 | 3.52 | 1.88 | 0.00 | 0.00 | 0.00 | 8.19 |
| CU | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.33 | 3.36 | 4.50 | 3.27 | 1.12 | 0.00 | 0.00 | 13.58 |

# WASHINGTON STATE - WEST OF CASCADES
## CIR - CROP IRRIGATION REQUIREMENT and CU - CROP CONSUMPTIVE USE

OAKVILLE 46.83 LATITUDE

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN TEMPERATURE (F) | 38.5 | 41.8 | 44.1 | 48.3 | 53.9 | 59.1 | 63.1 | 63.4 | 59.0 | 51.2 | 44.2 | 39.9 | |
| TOTAL PRECIPITATION (IN) | 8.81 | 6.53 | 6.11 | 3.73 | 2.35 | 1.96 | 0.81 | 1.35 | 2.69 | 5.21 | 8.43 | 9.18 | 57.16 |
| REFERENCE CROP ET (IN) | 0.05 | 0.52 | 1.35 | 2.18 | 3.30 | 3.68 | 4.18 | 3.31 | 2.47 | 1.37 | 0.31 | 0.00 | 22.72 |
| EFFECTIVE PRECIP (IN) | 0.05 | 0.52 | 1.32 | 2.04 | 1.61 | 1.37 | 0.58 | 0.94 | 1.72 | 1.34 | 0.31 | 0.00 | 11.80 |

PASTURE/TURF

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 2/18 | 12/31 | 0.00 | 0.00 | 0.00 | 0.03 | 1.53 | 2.13 | 3.39 | 2.20 | 0.63 | 0.00 | 0.00 | 0.00 | 9.92 |
| CU | | | 0.00 | 0.18 | 1.28 | 2.07 | 3.14 | 3.50 | 3.97 | 3.14 | 2.35 | 1.30 | 0.29 | 0.00 | 21.22 |

FIELD CORN

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 6/11 | 10/29 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.14 | 2.52 | 1.00 | 0.00 | 0.00 | 0.00 | 5.66 |
| CU | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.17 | 2.72 | 3.48 | 2.72 | 1.12 | 0.00 | 0.00 | 11.20 |

OLGA 48.62 LATITUDE

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN TEMPERATURE (F) | 38.9 | 41.4 | 44.2 | 48.5 | 53.2 | 57.0 | 59.7 | 59.8 | 56.6 | 50.8 | 44.5 | 40.8 | |
| TOTAL PRECIPITATION (IN) | 3.95 | 2.86 | 2.43 | 1.81 | 1.50 | 1.32 | 0.83 | 0.99 | 1.71 | 2.94 | 4.05 | 4.38 | 28.77 |
| REFERENCE CROP ET (IN) | 0.20 | 0.64 | 1.50 | 2.74 | 3.93 | 4.42 | 5.20 | 4.12 | 2.91 | 1.37 | 0.38 | 0.09 | 27.49 |
| EFFECTIVE PRECIP (IN) | 0.20 | 0.64 | 1.25 | 1.21 | 1.08 | 0.96 | 0.62 | 0.71 | 1.16 | 1.28 | 0.38 | 0.09 | 9.57 |

PASTURE/TURF

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 2/24 | 12/31 | 0.00 | 0.00 | 0.17 | 1.39 | 2.66 | 3.24 | 4.31 | 3.21 | 1.60 | 0.02 | 0.00 | 0.00 | 16.61 |
| CU | | | 0.00 | 0.09 | 1.43 | 2.60 | 3.73 | 4.20 | 4.94 | 3.91 | 2.76 | 1.30 | 0.36 | 0.09 | 25.41 |

FIELD CORN

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 6/11 | 10/29 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.48 | 2.65 | 3.59 | 2.03 | 0.00 | 0.00 | 0.00 | 8.75 |
| CU | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.32 | 3.28 | 4.28 | 3.20 | 1.05 | 0.00 | 0.00 | 13.13 |

OLYMPIA 46.97 LATITUDE

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN TEMPERATURE (F) | 37.4 | 40.8 | 43.2 | 47.5 | 53.5 | 58.8 | 63.0 | 63.0 | 58.1 | 50.1 | 42.9 | 38.8 | |
| TOTAL PRECIPITATION (IN) | 7.89 | 5.97 | 5.07 | 3.15 | 1.94 | 1.53 | 0.79 | 1.20 | 2.26 | 4.75 | 8.00 | 8.39 | 50.94 |
| REFERENCE CROP ET (IN) | 0.02 | 0.53 | 1.19 | 2.64 | 3.92 | 4.71 | 5.89 | 4.55 | 3.56 | 1.44 | 0.26 | 0.00 | 28.71 |
| EFFECTIVE PRECIP (IN) | 0.02 | 0.53 | 1.17 | 1.98 | 1.37 | 1.12 | 0.62 | 0.87 | 1.58 | 1.41 | 0.26 | 0.00 | 10.92 |

PASTURE/TURF

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 3/ 2 | 12/17 | 0.00 | 0.00 | 0.00 | 0.53 | 2.36 | 3.35 | 4.97 | 3.45 | 1.81 | 0.00 | 0.00 | 0.00 | 16.47 |
| CU | | | 0.00 | 0.00 | 1.06 | 2.51 | 3.72 | 4.47 | 5.60 | 4.32 | 3.38 | 1.37 | 0.25 | 0.00 | 26.68 |

FIELD CORN

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 5/29 | 10/16 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.26 | 4.29 | 4.13 | 2.13 | 0.00 | 0.00 | 0.00 | 11.81 |
| CU | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.12 | 2.40 | 4.89 | 5.01 | 3.70 | 1.01 | 0.00 | 0.00 | 17.13 |

# WASHINGTON STATE - WEST OF CASCADES
## CIR - CROP IRRIGATION REQUIREMENT and CU - CROP CONSUMPTIVE USE

PACKWOOD 46.60 LATITUDE

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN TEMPERATURE (F) | 35.1 | 38.8 | 42.1 | 47.4 | 53.8 | 59.8 | 64.5 | 64.3 | 58.5 | 50.4 | 40.7 | 36.2 | |
| TOTAL PRECIPITATION (IN) | 9.43 | 6.23 | 5.13 | 3.36 | 2.45 | 1.92 | 0.80 | 1.25 | 2.50 | 4.55 | 8.57 | 9.35 | 55.54 |
| REFERENCE CROP ET (IN) (PS) | 0.00 | 0.30 | 1.02 | 2.08 | 3.78 | 4.58 | 6.49 | 5.20 | 4.19 | 1.47 | 0.16 | 0.00 | 29.28 |
| EFFECTIVE PRECIP (IN) | 0.00 | 0.30 | 1.00 | 1.95 | 1.74 | 1.37 | 0.65 | 0.92 | 1.83 | 1.45 | 0.16 | 0.00 | 11.38 |

PASTURE/TURF

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 3/15 | 11/20 | 0.00 | 0.00 | 0.00 | 0.03 | 1.85 | 2.98 | 5.52 | 4.01 | 2.15 | 0.00 | 0.00 | 0.00 | 16.54 |
| CU | | | 0.00 | 0.00 | 0.50 | 1.98 | 3.59 | 4.35 | 6.17 | 4.94 | 3.98 | 1.40 | 0.10 | 0.00 | 27.00 |

FIELD CORN

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 6/25 | 10/ 7* | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | 2.57 | 3.67 | 2.78 | 0.00 | 0.00 | 0.00 | 9.06 |
| CU | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.36 | 3.25 | 4.58 | 4.61 | 0.35 | 0.00 | 0.00 | 13.14 |

PORT ANGLES 48.12 LATITUDE

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN TEMPERATURE (F) | 38.8 | 41.4 | 43.3 | 47.0 | 52.1 | 56.3 | 59.3 | 59.6 | 56.9 | 50.1 | 43.8 | 40.3 | |
| TOTAL PRECIPITATION (IN) | 3.99 | 2.81 | 2.11 | 1.29 | 0.89 | 0.82 | 0.52 | 0.79 | 1.23 | 2.44 | 3.99 | 4.32 | 25.20 |
| REFERENCE CROP ET (IN) | 0.21 | 0.64 | 1.43 | 2.58 | 3.79 | 4.32 | 5.12 | 4.08 | 2.93 | 1.33 | 0.37 | 0.08 | 26.89 |
| EFFECTIVE PRECIP (IN) | 0.21 | 0.64 | 1.13 | 0.86 | 0.63 | 0.59 | 0.41 | 0.56 | 0.84 | 1.16 | 0.37 | 0.08 | 7.48 |

PASTURE/TURF

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 2/26 | 12/31 | 0.00 | 0.00 | 0.23 | 1.60 | 2.97 | 3.52 | 4.45 | 3.32 | 1.94 | 0.10 | 0.00 | 0.00 | 18.13 |
| CU | | | 0.00 | 0.04 | 1.36 | 2.45 | 3.60 | 4.10 | 4.86 | 3.88 | 2.78 | 1.26 | 0.35 | 0.08 | 24.77 |

FIELD CORN

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 6/11 | 10/29 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.78 | 2.82 | 3.70 | 2.38 | 0.00 | 0.00 | 0.00 | 9.68 |
| CU | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.29 | 3.23 | 4.24 | 3.22 | 1.02 | 0.00 | 0.00 | 13.00 |

PUYALLUP 47.20 LATITUDE

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN TEMPERATURE (F) | 38.9 | 42.0 | 44.9 | 49.5 | 55.4 | 60.2 | 64.1 | 63.8 | 59.1 | 51.8 | 44.0 | 40.2 | |
| TOTAL PRECIPITATION (IN) | 5.58 | 4.54 | 4.03 | 2.72 | 1.95 | 1.75 | 0.82 | 1.12 | 1.98 | 3.59 | 5.68 | 6.32 | 40.08 |
| REFERENCE CROP ET (IN) | 0.09 | 0.59 | 1.30 | 2.84 | 4.14 | 4.88 | 6.04 | 4.64 | 3.66 | 1.54 | 0.30 | 0.00 | 30.02 |
| EFFECTIVE PRECIP (IN) | 0.09 | 0.59 | 1.28 | 1.78 | 1.38 | 1.27 | 0.65 | 0.81 | 1.38 | 1.52 | 0.30 | 0.00 | 11.04 |

PASTURE/TURF

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 2/16 | 12/31 | 0.00 | 0.00 | 0.00 | 0.92 | 2.55 | 3.36 | 5.09 | 3.60 | 2.09 | 0.00 | 0.00 | 0.00 | 17.62 |
| CU | | | 0.00 | 0.24 | 1.23 | 2.70 | 3.93 | 4.64 | 5.74 | 4.41 | 3.48 | 1.46 | 0.29 | 0.00 | 28.11 |

FIELD CORN

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 5/29 | 10/16 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.15 | 4.37 | 4.29 | 2.42 | 0.00 | 0.00 | 0.00 | 12.24 |
| CU | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.13 | 2.44 | 5.01 | 5.10 | 3.81 | 1.08 | 0.00 | 0.00 | 17.57 |

# WASHINGTON STATE - WEST OF CASCADES
## CIR - CROP IRRIGATION REQUIREMENT and CU - CROP CONSUMPTIVE USE

QUILCENE 47.82 LATITUDE

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN TEMPERATURE (F) | 36.6 | 40.5 | 43.5 | 48.5 | 54.4 | 59.5 | 63.5 | 63.3 | 58.6 | 50.3 | 42.4 | 38.0 | |
| TOTAL PRECIPITATION (IN) | 7.78 | 6.95 | 6.11 | 3.45 | 2.68 | 2.11 | 1.09 | 1.24 | 1.68 | 4.32 | 8.27 | 9.40 | 55.08 |
| REFERENCE CROP ET (IN) | 0.00 | 0.61 | 1.51 | 3.00 | 4.56 | 5.12 | 6.28 | 5.16 | 3.45 | 1.50 | 0.34 | 0.00 | 31.52 |
| EFFECTIVE PRECIP (IN) | 0.00 | 0.61 | 1.48 | 2.20 | 1.96 | 1.55 | 0.85 | 0.92 | 1.17 | 1.47 | 0.34 | 0.00 | 12.56 |

PASTURE/TURF

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 3/ 4 | 11/18 | 0.00 | 0.00 | 0.00 | 0.64 | 2.37 | 3.31 | 5.12 | 3.99 | 2.10 | 0.00 | 0.00 | 0.00 | 17.54 |
| CU | | | 0.00 | 0.00 | 1.25 | 2.85 | 4.33 | 4.86 | 5.97 | 4.90 | 3.28 | 1.43 | 0.19 | 0.00 | 29.06 |

FIELD CORN

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 6/ 4 | 10/22 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.17 | 3.66 | 4.68 | 2.55 | 0.00 | 0.00 | 0.00 | 11.05 |
| CU | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.00 | 4.52 | 5.57 | 3.73 | 0.80 | 0.00 | 0.00 | 16.62 |

RAYMOND 46.68 LATITUDE

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN TEMPERATURE (F) | 39.7 | 41.4 | 45.0 | 48.1 | 52.5 | 56.9 | 59.8 | 61.0 | 56.9 | 50.7 | 43.9 | 39.1 | |
| TOTAL PRECIPITATION (IN) | 10.16 | 10.42 | 9.37 | 6.15 | 4.39 | 2.88 | 1.58 | 0.95 | 3.44 | 6.41 | 13.31 | 10.19 | 79.25 |
| REFERENCE CROP ET (IN) | 0.11 | 0.50 | 1.41 | 2.16 | 3.16 | 3.47 | 3.86 | 3.11 | 2.32 | 1.34 | 0.30 | 0.00 | 21.74 |
| EFFECTIVE PRECIP (IN) | 0.11 | 0.50 | 1.39 | 2.13 | 2.75 | 1.95 | 1.13 | 0.66 | 2.03 | 1.31 | 0.30 | 0.00 | 14.25 |

PASTURE/TURF

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 2/21 | 11/27 | 0.00 | 0.00 | 0.00 | 0.00 | 0.25 | 1.35 | 2.54 | 2.30 | 0.17 | 0.00 | 0.00 | 0.00 | 6.61 |
| CU | | | 0.00 | 0.12 | 1.34 | 2.05 | 3.00 | 3.30 | 3.67 | 2.95 | 2.20 | 1.27 | 0.26 | 0.00 | 20.16 |

FIELD CORN

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 6/11 | 10/29 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.40 | 2.59 | 0.52 | 0.00 | 0.00 | 0.00 | 4.52 |
| CU | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.12 | 2.55 | 3.27 | 2.55 | 1.03 | 0.00 | 0.00 | 10.51 |

SEATTLE-TACOMA 47.45 LATITUDE

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN TEMPERATURE (F) | 39.1 | 42.6 | 44.7 | 48.9 | 55.0 | 60.3 | 64.5 | 64.4 | 59.9 | 52.3 | 44.8 | 40.6 | |
| TOTAL PRECIPITATION (IN) | 5.64 | 4.19 | 3.74 | 2.32 | 1.65 | 1.40 | 0.79 | 1.14 | 1.98 | 3.46 | 5.82 | 5.97 | 38.10 |
| REFERENCE CROP ET (IN) | 0.13 | 0.73 | 1.60 | 3.03 | 4.61 | 5.20 | 6.39 | 5.28 | 3.56 | 1.63 | 0.45 | 0.07 | 32.67 |
| EFFECTIVE PRECIP (IN) | 0.13 | 0.73 | 1.57 | 1.56 | 1.20 | 1.04 | 0.64 | 0.85 | 1.37 | 1.60 | 0.45 | 0.07 | 11.19 |

PASTURE/TURF

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 2/11 | 12/31 | 0.00 | 0.00 | 0.00 | 1.32 | 3.18 | 3.90 | 5.43 | 4.17 | 2.01 | 0.00 | 0.00 | 0.00 | 20.02 |
| CU | | | 0.00 | 0.42 | 1.52 | 2.88 | 4.38 | 4.94 | 6.07 | 5.02 | 3.38 | 1.55 | 0.43 | 0.07 | 30.65 |

FIELD CORN

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 6/ 4 | 10/22 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.80 | 3.94 | 4.87 | 2.48 | 0.00 | 0.00 | 0.00 | 12.09 |
| CU | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.03 | 4.60 | 5.70 | 3.84 | 0.87 | 0.00 | 0.00 | 17.04 |

# WASHINGTON STATE - WEST OF CASCADES
## CIR - CROP IRRIGATION REQUIREMENT and CU - CROP CONSUMPTIVE USE

SEDRO WOLLEY 48.50 LATITUDE

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN TEMPERATURE (F) | 38.3 | 41.4 | 44.8 | 49.5 | 54.8 | 59.2 | 62.3 | 62.5 | 58.4 | 51.5 | 44.0 | 40.0 | |
| TOTAL PRECIPITATION (IN) | 5.73 | 4.47 | 4.36 | 3.56 | 2.66 | 2.56 | 1.52 | 1.59 | 3.13 | 4.41 | 5.92 | 6.15 | 46.06 |
| REFERENCE CROP ET (IN) | 0.18 | 0.64 | 1.54 | 2.83 | 4.11 | 4.66 | 5.51 | 4.39 | 3.06 | 1.41 | 0.36 | 0.06 | 28.75 |
| EFFECTIVE PRECIP (IN) | 0.18 | 0.64 | 1.52 | 2.21 | 1.90 | 1.91 | 1.13 | 1.15 | 2.04 | 1.39 | 0.36 | 0.06 | 14.48 |

PASTURE/TURF

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 2/21 | 12/31 | 0.00 | 0.00 | 0.00 | 0.48 | 2.00 | 2.52 | 4.11 | 3.02 | 0.87 | 0.00 | 0.00 | 0.00 | 12.99 |
| CU | | | 0.00 | 0.15 | 1.46 | 2.69 | 3.90 | 4.43 | 5.23 | 4.17 | 2.91 | 1.34 | 0.34 | 0.06 | 26.69 |

FIELD CORN

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 6/11 | 10/29 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.31 | 3.43 | 1.33 | 0.00 | 0.00 | 0.00 | 7.06 |
| CU | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.36 | 3.42 | 4.57 | 3.37 | 1.16 | 0.00 | 0.00 | 13.86 |

SEQUIM 48.08 LATITUDE

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN TEMPERATURE (F) | 38.3 | 40.8 | 43.3 | 47.5 | 52.9 | 57.4 | 60.6 | 61.1 | 57.4 | 50.3 | 43.3 | 39.8 | |
| TOTAL PRECIPITATION (IN) | 2.16 | 1.52 | 1.30 | 0.98 | 1.02 | 1.03 | 0.53 | 0.63 | 1.02 | 1.40 | 2.28 | 2.53 | 16.40 |
| REFERENCE CROP ET (IN) | 0.19 | 0.61 | 1.43 | 2.63 | 3.88 | 4.44 | 5.27 | 4.23 | 2.97 | 1.34 | 0.34 | 0.06 | 27.41 |
| EFFECTIVE PRECIP (IN) | 0.19 | 0.55 | 0.79 | 0.66 | 0.72 | 0.74 | 0.42 | 0.45 | 0.70 | 0.85 | 0.34 | 0.06 | 6.48 |

PASTURE/TURF

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 3/ 4 | 12/16 | 0.00 | 0.00 | 0.05 | 1.84 | 2.96 | 3.48 | 4.59 | 3.57 | 2.12 | 0.43 | 0.00 | 0.00 | 19.05 |
| CU | | | 0.00 | 0.00 | 1.18 | 2.50 | 3.69 | 4.22 | 5.01 | 4.02 | 2.82 | 1.27 | 0.32 | 0.06 | 25.09 |

FIELD CORN

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 6/11 | 10/29 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.67 | 2.90 | 3.96 | 2.57 | 0.00 | 0.00 | 0.00 | 10.10 |
| CU | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.32 | 3.32 | 4.40 | 3.27 | 1.10 | 0.00 | 0.00 | 13.41 |

SHELTON 47.20 LATITUDE

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN TEMPERATURE (F) | 38.4 | 41.8 | 44.3 | 49.0 | 55.2 | 60.5 | 64.4 | 64.5 | 59.7 | 51.5 | 44.1 | 39.9 | |
| TOTAL PRECIPITATION (IN) | 10.2 | 8.28 | 6.99 | 4.10 | 2.16 | 1.63 | 0.91 | 1.25 | 2.63 | 5.75 | 10.21 | 10.99 | 65.10 |
| REFERENCE CROP ET (IN) | 0.1 | 0.69 | 1.57 | 3.03 | 4.63 | 5.21 | 6.36 | 5.28 | 3.54 | 1.58 | 0.42 | 0.05 | 32.46 |
| EFFECTIVE PRECIP (IN) | 0.1 | 0.69 | 1.54 | 2.57 | 1.57 | 1.20 | 0.72 | 0.93 | 1.82 | 1.56 | 0.42 | 0.05 | 13.17 |

PASTURE/TURF

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 2/18 | 12/ 1 | 0.00 | 0.00 | 0.00 | 0.31 | 2.82 | 3.75 | 5.32 | 4.09 | 1.55 | 0.00 | 0.00 | 0.00 | 17.84 |
| CU | | | 0.00 | 0.23 | 1.49 | 2.88 | 4.40 | 4.95 | 6.04 | 5.02 | 3.36 | 1.50 | 0.40 | 0.05 | 30.32 |

FIELD CORN

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 6/ 4 | 10/22 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.61 | 3.83 | 4.79 | 2.01 | 0.00 | 0.00 | 0.00 | 11.24 |
| CU | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.03 | 4.58 | 5.70 | 3.82 | 0.84 | 0.00 | 0.00 | 16.98 |

# WASHINGTON STATE - WEST OF CASCADES
## CIR - CROP IRRIGATION REQUIREMENT and CU - CROP CONSUMPTIVE USE

SNOQUALMIE FALL 47.55 LATITUDE

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN TEMPERATURE (F) | 38.4 | 41.3 | 43.9 | 48.5 | 54.0 | 58.7 | 62.8 | 62.7 | 57.8 | 50.7 | 43.5 | 39.7 | |
| TOTAL PRECIPITATION (IN) | 8.24 | 6.29 | 6.12 | 4.31 | 3.33 | 2.92 | 1.39 | 1.59 | 3.17 | 5.47 | 8.82 | 9.17 | 60.82 |
| REFERENCE CROP ET (IN) | 0.09 | 0.66 | 1.54 | 2.99 | 4.50 | 5.01 | 6.17 | 5.09 | 3.37 | 1.53 | 0.39 | 0.03 | 31.36 |
| EFFECTIVE PRECIP (IN) | 0.09 | 0.66 | 1.51 | 2.67 | 2.33 | 2.13 | 1.05 | 1.17 | 2.10 | 1.50 | 0.39 | 0.03 | 15.63 |

PASTURE/TURF

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 2/23 | 11/27 | 0.00 | 0.00 | 0.00 | 0.17 | 1.94 | 2.63 | 4.81 | 3.66 | 1.10 | 0.00 | 0.00 | 0.00 | 14.32 |
| CU | | | 0.00 | 0.11 | 1.46 | 2.84 | 4.27 | 4.76 | 5.86 | 4.84 | 3.20 | 1.45 | 0.33 | 0.00 | 29.14 |

FIELD CORN

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 6/ 4 | 10/22 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.39 | 4.34 | 1.54 | 0.00 | 0.00 | 0.00 | 9.27 |
| CU | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.95 | 4.44 | 5.50 | 3.64 | 0.81 | 0.00 | 0.00 | 16.35 |

TACOMA 47.25 LATITUDE

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN TEMPERATURE (F) | 40.1 | 43.4 | 45.7 | 50.1 | 56.0 | 60.9 | 64.9 | 65.0 | 60.6 | 53.1 | 45.8 | 41.5 | |
| TOTAL PRECIPITATION (IN) | 5.33 | 3.90 | 3.62 | 2.45 | 1.63 | 1.41 | 0.84 | 1.12 | 1.91 | 3.32 | 5.59 | 5.86 | 36.98 |
| REFERENCE CROP ET (IN) | 0.18 | 0.78 | 1.67 | 3.15 | 4.72 | 5.26 | 6.43 | 5.34 | 3.63 | 1.69 | 0.50 | 0.11 | 33.45 |
| EFFECTIVE PRECIP (IN) | 0.18 | 0.78 | 1.65 | 1.66 | 1.19 | 1.04 | 0.67 | 0.83 | 1.33 | 1.62 | 0.50 | 0.11 | 11.56 |

PASTURE/TURF

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 1/ 2 | 12/31 | 0.00 | 0.00 | 0.00 | 1.33 | 3.30 | 3.95 | 5.43 | 4.24 | 2.11 | 0.00 | 0.00 | 0.00 | 20.37 |
| CU | | | 0.17 | 0.74 | 1.59 | 2.99 | 4.48 | 5.00 | 6.11 | 5.07 | 3.45 | 1.61 | 0.48 | 0.10 | 31.79 |

FIELD CORN

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 6/ 4 | 10/22 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.81 | 3.93 | 4.95 | 2.59 | 0.00 | 0.00 | 0.00 | 12.27 |
| CU | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.05 | 4.63 | 5.77 | 3.92 | 0.90 | 0.00 | 0.00 | 17.27 |

TOLEDO 46.40 LATITUDE

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN TEMPERATURE (F) | 38.3 | 42.2 | 45.1 | 48.6 | 54.5 | 59.3 | 63.6 | 63.9 | 59.5 | 52.0 | 44.1 | 39.4 | |
| TOTAL PRECIPITATION (IN) | 7.15 | 4.80 | 4.78 | 3.13 | 2.21 | 2.07 | 0.80 | 1.49 | 2.29 | 3.84 | 6.03 | 6.91 | 45.50 |
| REFERENCE CROP ET (IN) | 0.08 | 0.61 | 1.31 | 2.74 | 4.01 | 4.74 | 5.93 | 4.63 | 3.69 | 1.57 | 0.32 | 0.00 | 29.62 |
| EFFECTIVE PRECIP (IN) | 0.08 | 0.61 | 1.29 | 1.98 | 1.58 | 1.50 | 0.63 | 1.09 | 1.61 | 1.54 | 0.32 | 0.00 | 12.23 |

PASTURE/TURF

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 2/15 | 11/29 | 0.00 | 0.00 | 0.00 | 0.61 | 2.23 | 3.00 | 5.00 | 3.31 | 1.90 | 0.00 | 0.00 | 0.00 | 16.05 |
| CU | | | 0.00 | 0.27 | 1.24 | 2.60 | 3.81 | 4.50 | 5.63 | 4.40 | 3.51 | 1.49 | 0.29 | 0.00 | 27.75 |

FIELD CORN

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 5/29 | 10/16 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.88 | 4.31 | 4.00 | 2.23 | 0.00 | 0.00 | 0.00 | 11.41 |
| CU | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.13 | 2.37 | 4.92 | 5.09 | 3.84 | 0.57 | 0.00 | 0.00 | 16.92 |

# WASHINGTON STATE - WEST OF CASCADES
## CIR - CROP IRRIGATION REQUIREMENT and CU - CROP CONSUMPTIVE USE

VANCOUVER 45.68 LATITUDE

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN TEMPERATURE (F) | 38.3 | 42.0 | 46.4 | 51.1 | 56.6 | 61.7 | 66.2 | 66.2 | 61.5 | 53.7 | 45.3 | 40.1 | |
| TOTAL PRECIPITATION (IN) | 5.64 | 4.50 | 3.77 | 2.52 | 2.12 | 1.66 | 0.63 | 0.88 | 1.91 | 3.09 | 5.93 | 6.30 | 38.95 |
| REFERENCE CROP ET (IN) | 0.09 | 0.61 | 1.40 | 2.96 | 4.21 | 4.97 | 6.22 | 4.84 | 3.88 | 1.69 | 0.39 | 0.00 | 31.26 |
| EFFECTIVE PRECIP (IN) | 0.09 | 0.61 | 1.38 | 1.68 | 1.52 | 1.21 | 0.51 | 0.64 | 1.34 | 1.58 | 0.39 | 0.00 | 10.95 |

PASTURE/TURF

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 2/16 | 12/31 | 0.00 | 0.00 | 0.00 | 1.14 | 2.49 | 3.51 | 5.39 | 3.96 | 2.34 | 0.03 | 0.00 | 0.00 | 18.85 |
| CU | | | 0.00 | 0.25 | 1.33 | 2.81 | 4.00 | 4.72 | 5.91 | 4.60 | 3.69 | 1.61 | 0.37 | 0.00 | 29.28 |

FIELD CORN

| | BEG | END | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | SEASON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CIR | 5/29 | 10/16 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.24 | 4.64 | 4.68 | 2.69 | 0.00 | 0.00 | 0.00 | 13.26 |
| CU | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.13 | 2.44 | 5.16 | 5.32 | 4.04 | 0.61 | 0.00 | 0.00 | 17.70 |