**Agricultural Water Conservation**

Applicants shall use water-efficient practices for the irrigation system installed and shall take reasonable actions to maintain that efficiency throughout the term of the permit. Reasonable actions may include retrofitting irrigation systems over time, regular maintenance, and other manufacturer recommendations.

1. Irrigation System Maintenance and Evaluation

For the purposes of this strategy, distribution uniformity is a measure of how uniformly water is applied to the area being irrigated and is not the irrigation system efficiency. Permittees shall maintain the minimum distribution uniformity requirements provided in Table 2-1. An applicant shall submit a Mobile Irrigation Lab (MIL) evaluation or its equivalent as approved by the District during permit application to ensure the minimum distribution uniformities are met. MIL evaluations or their equivalent shall be required to be submitted every five years for the duration of the permit. If the assessment determines the irrigation system does not meet the minimum requirements as set forth below, the permittee must submit a plan to the District outlining how the minimum requirements will be met and a timeline for completion. Permittees who have been allocated water based on the use of above ground drip tubing that is replaced each growing season shall be exempt from the 5-year reporting requirement of this section.

**Table XX. Irrigation Distribution Uniformity Minimums**

|  |  |
| --- | --- |
| **Irrigation System Type** | **Minimum Distribution Uniformity (DU), %** |
| Micro-Drip | 75-85 |
| Micro-Spray | 80-90 |
| Low Pressure Center Pivot or Lateral Move | 75-85 |
| Standard Center Pivot with End Guns | 65-75 |
| In Place Overhead Sprinklers | 70-75 |

1. Seepage and Subsurface Irrigation

Section under development.

1. Irrigation System Management

The applicant shall implement water saving Best Management Practices (BMPs) as appropriate to their specific field conditions and must be implemented project-wide. BMPs, outlined below in Table XX, are scored based on their water savings potential. At a minimum, each permittee must select at least one option from the level 5 tier or its equivalent by combining multiple lower level BMP options. For example, the combination of one Level 4 and one Level 1 BMP would be equivalent to a Level 5 BMP. Additional BMPs may be proposed by the applicant and evaluated by the District. If alternative BMPs are proposed, the applicant must submit supporting information demonstrating the effectiveness of the water conservation BMPs proposed.

**Table XX – Water Saving BMPs**

|  |
| --- |
| Level 5 |
| * Soil Moisture Sensors w/ Irrigation System Centralized/Automated Remote Controlling |
| * Conversion from Seepage to Center Pivot Irrigation/Irrigation Drain Tile |
| Level 4 |
| * Conversion of Solid Set Sprinklers to Micro-Spray/Single-Pot Irrigation |
| * Soil Moisture Sensors |
| * Centralized/Automated Remote Controlling |
| Level 3 |
| * Variable Rate Irrigation w/ Variable Frequency Drive |
| * End Gun Removal w/ Low-Pressure End of Pivot Retrofit |
| * Precision Land Grading |
| * Pulse Irrigation |
| Level 2 |
| * Weather Station w/ ET Measurements |
| * Self-reporting using Flow Meters |
| * Variable Rate Irrigation |
| * Conservation Tillage w/ Cover Crops |
| * Variable Frequency Drive |
| Level 1 |
| * Automated Rain Shut-off Valves |
| * Automated Pressure Shut-off Valves |
| * Cover Crops |

Tailwater recovery systems and Alternative Water Supply (AWS) projects will be given significant weight based on their total water saving potential. These projects may also be used in calculating the permittee’s offset of their apportioned share and future demand. Permittees who plan to implement and maintain a Tailwater Recovery System or AWS Project may be exempt from this section provided the water savings is higher than the estimated BMPs appropriate for their specific field conditions.

The permittee must submit an annual report certifying the selected BMPs are still in place. **Form XX – Agricultural Water Conservation BMPs Form** shall be filled out and submitted yearly by [date]. Permittees should include any documentation verifying their self-certification as applicable, including data from sensors or weather stations, pictures of systems during the growing season, etc. The self-certification may be audited by the District at any time.