



Westlands Water District

2019 Groundwater Credit Pilot Program Terms and Conditions

Westlands Water District (District) is developing a Groundwater Sustainability Plan (GSP) to comply with the Sustainable Groundwater Management Act (SGMA) in 2020. The District anticipates the GSP will identify projects that may be implemented by water users or the District to generate “groundwater credits” for future use.

The Groundwater Credit Pilot Program (Program) was developed to promote conjunctive use in the Westside Subbasin and to inform the development of the GSP. “Groundwater Credits” will be allocated to water users who develop a qualifying recharge project and provide the District data to support the project’s recharge benefit to the groundwater subbasin. The “groundwater credits” *may* be used in subsequent years for groundwater pumping as provided below. All “groundwater credits” shall be subject to the policies developed pursuant the District’s GSP as they may be updated over time. Policies may include *but are not limited to* avoidance of undesirable results, quantification, transfer, expiration of credits, a leave-behind quantity (accounting for losses), and termination of the Program.

Interested participants must follow the general terms and conditions listed below to receive groundwater credit for subsequent years:

- 1. Groundwater wells shall not be pumped during the 2019-20 Contract Water Year and the participant shall not receive delivery of groundwater from another neighboring landowner. Additional conditions applied to the related wells include:**
 - a. Wells shall be furnished with a (District approved) meter.
 - b. Opening meter readings are required from all groundwater wells
 - c. Continued access by District personnel.
 - d. Exceptions may be granted to allow the participant to pump groundwater and continue to receive a “groundwater credit” for a groundwater recharge project if:
 - i. The participant can demonstrate that groundwater pumping is required due to limited capacity in the District’s distribution system.

2. A participant may recharge the Westside Subbasin through one of the following methods:
 - a. Percolations ponds/basin
 - i. Land selected for this activity must be favorable for passive recharge. Project will not be accepted if lands are drainage impaired or have geology that could create a perched water condition



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- b. Over irrigating crops
 - c. Sub lateral over irrigating
 - d. Dry well injection
 - e. Aquifer Storage and Recovery (ASR); program is pending the Regional Board's approval.
3. Approved projects in this program are required to install a dedicated water meter to measure the amount of water delivered to the recharge project. With projects that are shared by multiple water users (e.g., Recharge Basin with one meter), the management of the groundwater credit to that specific project will be managed by the water users that share the project. Groundwater credits will only be allocated to water users that meet the requirements of term 1.
4. Participants are required to comply with the Checklist set forth below and provide the District with the following information:
 - a. Infiltration rate and Evaporation rate (daily)
 - b. Cone Penetration Test (CPT) results for surface recharge projects
 - c. Crop type (if applicable)
 - d. Water Quality
 - i. Recharged Water (required for all non-SLC water types)
 - ii. Native Groundwater at Project site
 - iii. Comingled Water Quality
5. Appropriate information will need to be provided by the Participant to quantify the volume of water being recharged by their respective method of choice. Account and project specific information provided by the water user will remain confidential. The amount of groundwater credit received will be allocated based on the supporting documentation.

If you have any questions regarding the Groundwater Credit Pilot Program, please contact Antonio Solorio (asolorio@wwd.ca.gov) at (559)241-6244.



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CHECKLIST

Participant Contact Information

- Name, Company, Email, Phone

Participant Project Information/Support

- Type of Project
- Meter Information (Number and Location)
- Project Layout
- Location of Project
- Source of Supply
- Capacity of Project (AF daily and annually)
- Soil Conditions
- Hydraulic Conductivity
- Total Recharge time-period



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WWD STAFF ONLY

Application Date	
Date of Approval	
Total Groundwater Credit	
Recharge Project Number	

Application for Groundwater Credit Pilot Program

Participant Information and Recharge Request:			
Company		Recharge Start Date	
Water User Account		Recharge End Date	
Field ID		Projected Number of Days	
Meter Number		Proposed Amount of Recharge (AF)	
Contact Name		Approved Amount of Recharge (AF)	
Contact Number		Recharge Start Date	
Email		Aquifer to be recharged	

Source(s) of Water Supply (Check all Box(es) that apply and provide supporting information):		
	Water Source	Quantity
<input type="checkbox"/>	Central Valley Project Water	
<input type="checkbox"/>	Section 215 (Identify source and attach water quality characteristics)	
<input type="checkbox"/>	Supplemental Water (Identify source and attach water quality characteristics)	
<input type="checkbox"/>	Other (Identify source and attach water quality characteristics)	

Recharge Project Type:

- Percolation Ponds/Basins (Page 5 Form)
- Over/Flood Irrigation (Page 6 Form)
- Sub Lateral Over Irrigation (Page 7 Form)
- Dry Well Injection (Page 8 Form)
- Aquifer Storage and Recovery (Page 9 Form)

I hereby acknowledge the terms and conditions of the District Groundwater Credit Pilot Program and agree that all groundwater credits are subject to the policies developed pursuant the District's Groundwater Sustainability Plan.

By: _____

Date: _____

Print Name: _____



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Percolation Pond/ Basin Application Form

<input type="checkbox"/> Percolation Ponds/Basins	
Recharge Basin Location	
Description:	
APN(s):	
Map:	<input type="checkbox"/> Attachment Required
Size of Recharge Basin	
Properties (dimensions):	
Site Layout:	<input type="checkbox"/> Attachment Required
Recharge Properties (Projected)	
Infiltration Rate	
Evaporation Rate	
<i>Geological Properties (hydraulic conductivity, percentage of coarse sediment, etc)</i>	
<i>Geotechnical Investigation (pre and post project)</i>	Check all that apply (attachment required) <input type="checkbox"/> CPT <input type="checkbox"/> SPT <input type="checkbox"/> Exploratory Boring <input type="checkbox"/> Recharge Study in the vicinity <input type="checkbox"/> Other; _____
Target	<input type="checkbox"/> Upper Aquifer or <input type="checkbox"/> Lower Aquifer
<i>Water Quality (Pre-Project)</i>	
Native Groundwater	
Source Water	
<i>Depth to Water Table (bgs)</i>	
Surrounding Monitoring Locations	



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Over/Flood Irrigation Application Form

<input type="checkbox"/> Over Irrigation (Flood Irrigation)*	
Crop Information	
Description/Type(s):	
APN(s):	
Map:	<input type="checkbox"/> Attachment Required
Site Layout:	<input type="checkbox"/> Attachment Required
Crop Demand (AF/acre)	
<i>Recharge Properties (projected)</i>	
Infiltration Rate	
Evaporation Rate	
Dimensions	
<i>Geological Properties (hydraulic conductivity, percentage of coarse sediment, etc)</i>	
<i>Geotechnical Investigation (pre and post project)</i>	Check all that apply (attachment required) <input type="checkbox"/> CPT <input type="checkbox"/> SPT <input type="checkbox"/> Exploratory Boring <input type="checkbox"/> Recharge Study in the vicinity <input type="checkbox"/> Other; _____
Target	<input type="checkbox"/> Upper Aquifer or <input type="checkbox"/> Lower Aquifer
<i>Water Quality (Pre-Project)</i>	
Native Groundwater	
Source Water	
<i>Depth to Water Table (bgs)</i>	
Surrounding Monitoring Locations	

*Separate forms are required for each location or if crops differ.



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Sub Lateral Over Irrigation Application Form

<input type="checkbox"/> Sub Lateral Over Irrigation	
Location of Sub Lateral	
Description:	
APN(s):	
Map:	<input type="checkbox"/> Attachment Required
As-Builts/Plans of Sub Laterals	<input type="checkbox"/> Attachment Required
<i>Recharge Properties (projected)</i>	
Infiltration Rate	
Evaporation Rate	
<i>Geological Properties (hydraulic conductivity, percentage of coarse sediment, etc)</i>	
<i>Geotechnical Investigation (pre and post project)</i>	Check all that apply (attachment required) <input type="checkbox"/> CPT <input type="checkbox"/> SPT <input type="checkbox"/> Exploratory Boring <input type="checkbox"/> Recharge Study in the vicinity <input type="checkbox"/> Other; _____
<i>Water Quality (Pre-Project)</i>	
Native Groundwater	
Source Water	
<i>Depth to Water Table (bgs)</i>	
Surrounding Monitoring Locations	



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Dry Well Injection Application Form

<input type="checkbox"/> Dry Well Injection	
Dry Well(s) Location	
Description:	
APN(s):	
Map:	<input type="checkbox"/> Attachment Required
Dry Well(s) Properties	
Number of Dry Well(s)	
Depth of Dry Well(s)	
Site Layout:	<input type="checkbox"/> Attachment Required
<i>Geological Properties (hydraulic conductivity, percentage of coarse sediment, etc)</i>	
<i>Geotechnical Investigation (pre and post project)</i>	Check all that apply (attachment required) <input type="checkbox"/> CPT <input type="checkbox"/> SPT <input type="checkbox"/> Exploratory Boring <input type="checkbox"/> Recharge Study in the vicinity <input type="checkbox"/> Other; _____
<i>Water Quality (Pre-Project)</i>	
Native Groundwater	
Source Water	
<i>Depth to Water Table (bgs)</i>	
Surrounding Monitoring Locations	



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Aquifer Storage and Recovery Application Form

<input type="checkbox"/> Aquifer Storage and Recovery (Not Approved until the Regional Board Approves the Program)	
Well Location	
Well ID	
Meter ID (Injection)*	
Meter ID (Recovery)*	
Sand Filter Information	
Map	<input type="checkbox"/> Attachment Required
Site Layout	<input type="checkbox"/> Attachment Required
Well Properties	
Capacity (CFS)	
Screening Location	<input type="checkbox"/> Upper Aquifer <input type="checkbox"/> Lower Aquifer or <input type="checkbox"/> Composite Well
Well Completion Report	<input type="checkbox"/> Attachment Required
<i>Geological Properties (hydraulic conductivity, percentage of coarse sediment, etc)</i>	
<i>Water Quality (Pre-Project)</i>	
Native Groundwater	
Source Water	
<i>Depth to Water Table (bgs)</i>	

*The Participant must have a functioning meter that measures the volume of water injected and recovered.