

# Hydrology Worksheet for Downstream Landowner-Operator

## Effects of Upstream Tile Outlets and/or Increased Water Regime

**Instructions:** Please provide sufficient information on this worksheet so that NRCS can determine if your proposed changes will affect the wetland(s) on your property. Information needs to clearly outline the causes of the increased water regime on your property, the timing and amount of extra water, and the impact of your proposed changes. Please refer to the NRCS fact sheet “Handling an Increase in Water from Upstream” for some of the details to be sure and cover. Use additional paper and/or include other attachments as needed to explain your proposed project.

### State your goal:

What do you want to achieve in regard to addressing the effects of the increased water flow onto your property from upstream?

### Attachments:

Map/Aerial Photo: If possible, prepare a map of drainage features and irrigated areas including, but not limited to:

- Relevant drainage areas above your property
- Relevant new and/or existing drainage tile/pipe installation and where it outlets
- Relevant pipe inlet risers feeding buried tile/pipelines
- Relevant new and/or changed irrigated areas

### Wetlands:

Obtain a NRCS certified wetland determination. That determination will identify if you have wetlands and help clarify what options may be available to address increased flows.

**\*a copy of your NRCS certified wetland determination MUST be attached\***

Is a wetland present on your property? Yes \_\_\_\_\_ No \_\_\_\_\_

### Watershed Area:

- Watershed area(acres) entering the upstream end of your property: \_\_\_\_\_
- Watershed area(acres) at the downstream end of your property: \_\_\_\_\_

### Drainage:

- Initial date when increased flows started effecting your property \_\_\_\_\_
  - Drainage area(acres<sup>1</sup>) of the installed system that increased flows: \_\_\_\_\_
- If there is a change in the area draining onto your property due to the installation of the upstream system –
  - What was the original drainage area(acres): \_\_\_\_\_
  - What is the current drainage area(acres): \_\_\_\_\_

<sup>1</sup> The approximate amount of drainage area that is “feeding” the system that is outletting onto your property.

- Was there, or is there now, a channel on your property? Yes \_\_\_\_\_ No \_\_\_\_\_
  - Has the channel changed in shape, depth or size since the change of upstream flows? Yes \_\_\_\_\_ No \_\_\_\_\_
  - If yes, document/quantify change in shape, depth and size:

**Analysis of Conditions:**

Describe your method for determining the change in flow (pre and post installation of upstream system) and its effects on your property. Quantify the amount of change in flow and timing throughout the year:

If applicable, provide the following information about upstream irrigation runoff on to your property:

- Do you experience/receive runoff from upstream irrigation system(s)?
- If so then when did this start? (Describe the amount in terms of gallons per minute, or depth and width of flow and how it changes/differs according to the time of year or each month)

**Proposed Action:**

Describe your proposed plan to address the effects from added flow from the upstream system. Include calculations, plans or drawings, in addition to this worksheet as needed. Keep in mind that natural base flows need to be maintained throughout the yearly cycle if wetlands are present near or down landscape from proposed actions.

How will the wetland on your property be impacted by the action?