



NEVADA DIVISION OF
**ENVIRONMENTAL
PROTECTION**



Nevada Department of
**CONSERVATION &
NATURAL RESOURCES**

Pollutant Load Estimation Tool (PLET)

Overview and Demonstration

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Presented by

Zack Carter
Environmental Scientist

NONPOINT SOURCE PROGRAM



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CWA 319(h) Grants

Nonpoint Source Grant Program

The Nevada Division of Environmental Protection (NDEP) 319(h) Nonpoint Source Program (NPS Program) provides grant funding to qualifying counties, conservation districts, higher education institutions, regional agencies, and nonprofit organizations to improve conditions of Nevada's watersheds and protect against nonpoint source (NPS) water pollution.

NPS water pollution occurs when rain, snowmelt and irrigation water flows over developed or disturbed land, carrying with it contaminants including oil, sediment, pesticides, bacteria and nutrients. This contaminated water makes its way into Nevada's waterways either directly or through storm drains. Nonpoint source pollution continues to be a significant threat to Nevada's waterways. Implementing water quality restoration projects and educating our citizens on how they can help will reduce that threat.

The NPS Program is now soliciting proposals for the implementation of on-the-ground projects to mitigate nonpoint source pollution or efforts that lead to watershed plans that will

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[Water Quality Monitoring](#)

[Total Maximum Daily Loads
\(TMDLs\)](#)

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Practices Handbook - Online
Toolbox](#)

[Lake Tahoe Watershed](#)

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PLET

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Polluted Runoff: Nonpoint Source (NPS) Pollution

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Program](#)[Coastal Zone Act
Reauthorization
Amendments \(CZARA\)](#)[Grants Reporting and
Tracking System \(GRTS\)](#)[319 Grant program for States
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Pollutant Load Estimation Tool (PLET)

The Pollutant Load Estimation Tool (PLET) is replacing the Spreadsheet Tool for Estimating Pollutant Loads (STEPL). PLET uses the same underlying formulas as STEPL, but in a more user-friendly web interface. Both tools employ simple algorithms to calculate:

- nutrient and sediment loads from different land uses, and
- the load reductions that would result from the implementation of various best management practices (BMPs).

On this page:

- [Overview](#)
- [Model Documentation](#)
- [Input Data Server for PLET](#)
- [Training Materials](#)
- [Questions and Answers about the PLET model](#)

Questions or Comments?

- [Contact email-based
Help Desk for PLET
Model support.](#)

Related Information

- [Nutrient and
Sediment Estimation
Tools for Watershed
Protection \(PDF\)](#) (Last
updated: 03/15/2018)
- [Grants Reporting and
Tracking System](#)

POLLUTANT LOAD REDUCTIONS

- To meet Water Quality Standard
 - $Q \times C_{\text{measured}} = L_{\text{estimate}}$
 - $Q \times C_{\text{std}} = L_{\text{desired}}$
 - $L_{\text{estimate}} - L_{\text{desired}} = \text{Load Reduction needed to meet WQ Std}$

PLET then is a tool used to determine how much of this load reduction might be gained by implementing BMPs.

INTERFACE

Pollutant Load Estimation Tool

TitlePractice Run Demo 20240129

StateNevada

Primary Watershed160502010505 (Eagle Valley-Carson River)

Verify Location

CountyCARSON CITY

Weather StationCARSON CITY

Share Model

Copy Model

Delete Model

Download Input Data Server Data

Exit

Add / Edit Watersheds

Gullies and Streambanks

Urban BMP Tool

Manure Application

Rainfall Correction Factor0.7752

Raindays Correction Factor0.3365

Inputs	BMPs	Total Loads	Additional Reference Tables
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Mandatory Inputs *NOTE: Required fields are highlighted in red*

1. Watershed Land Use Area (ac) and Precipitation (in)

Double-click on the "HSG" field to select a Hydrologic Soil Group [NOTE: hover over the "HSG" column header for more information].

Watershed	HSG	Urban	Cropland	Pastureland	Forest	User Defined	Feedlots	Total	Feedlots Percent Paved	Annual Rainfall
160502010505 - Eagle Valley-Carson River	C	10979.18	22.68	3708.43	24931.75	0.00	0.04	39642.0788	0-24%	10.69

2. Agricultural Animals (Animal Count)

Watershed	Beef Cattle	Young Beef	Dairy Cattle	Young Dairy Stock	Swine (Hog)	Feeder Pig	Sheep	Horse	Chicken	Turkey	Duck	# Of Manure Applied to Crops
160502010505 - Eagle Valley-Carson River	62.00	0.00	0.00	0.00	0.00	0.00	0.00	3.00	6.00	0.00	0.00	

3. Septic and Illegal Wastewater Discharge

Watershed	Number Of Septic Systems	Population Per Septic System	Septic Failure Rate, %	Waste Water Direct Discharge, # Of People
160502010505 - Eagle Valley-Carson River	1896.00	2.00	0.27	0.00

BEST MANAGEMENT PRACTICES (BMP)

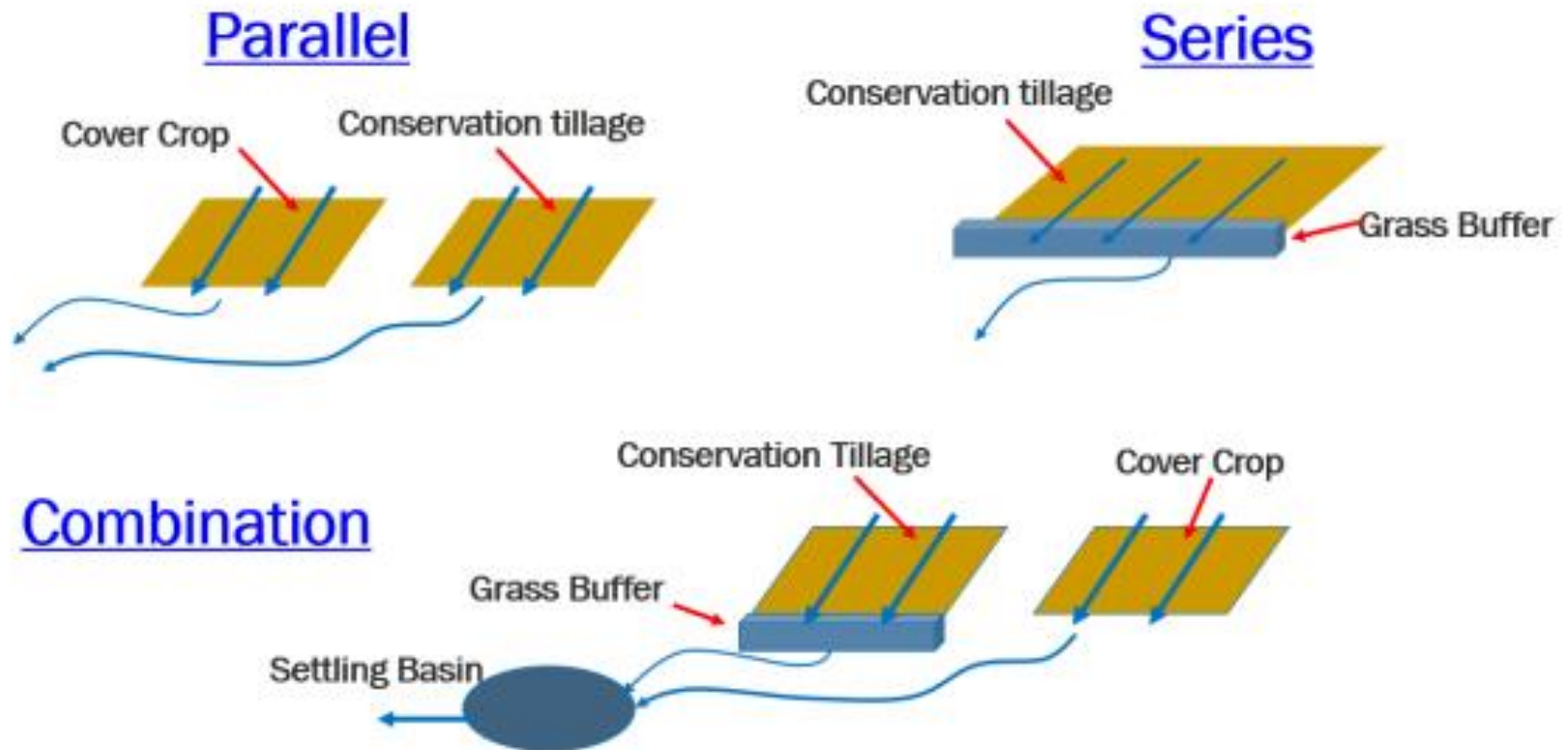


Figure 26. Illustration of BMPs in parallel and series configurations, and a combination of both.

DEMONSTRATION

Pollutant Load Estimation Tool (PLET) - Login



Email / UserID:

For first-time users, this email will be used to register guest access to the PLET application. No further personal information is required. If possible, please use your email address from your organization.

RESOURCES

- PLET webpage (access to tool): <https://www.epa.gov/nps/plet>
- User's guide: https://www.epa.gov/system/files/documents/2022-04/user-guide-final-04-18-22_508.pdf
 - assumptions, underlying formulas, default values, and references
- BMP documentation:
https://www.epa.gov/system/files/documents/2023-04/BMP_Description_revised%203-9-23_final%20with%20alt%20text_508.pdf
- Documentation of other models:
<https://www.epa.gov/sites/default/files/2018-08/documents/loadreductionmodels2018.pdf>

ADDITIONAL RESOURCES DISCUSSED DURING PRESENTATION

- Web Soil Survey:
<https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>
- EPA EnviroAtlas: <https://enviroatlas.epa.gov/enviroatlas/interactivemap/>
- National Hydrography Dataset:
<https://www.arcgis.com/apps/mapviewer/index.html?layers=f1f45a3ba37a4f03a5f48d7454e4b654>
- SSURGO Soil Survey Database:
<https://www.nrcs.usda.gov/resources/data-and-reports/soil-survey-geographic-database-ssurgo>
- Watershed Erosion Prediction Project (WEPP):
<https://wepp.cloud/weppcloud/>
- Model My Watershed: <https://modelmywatershed.org/>

Questions?



Contact

Zack Carter

Environmental Scientist

Bureau of Water Quality Planning

Phone: (775) 687-9456

Email: zcarter@ndep.nv.gov