

## **Zone Flood Potential Plots, with Prediction Equations: Western United States**

2024-1

115 zones

Months of occurrence for the largest 5% floods also provided in seasonal plots

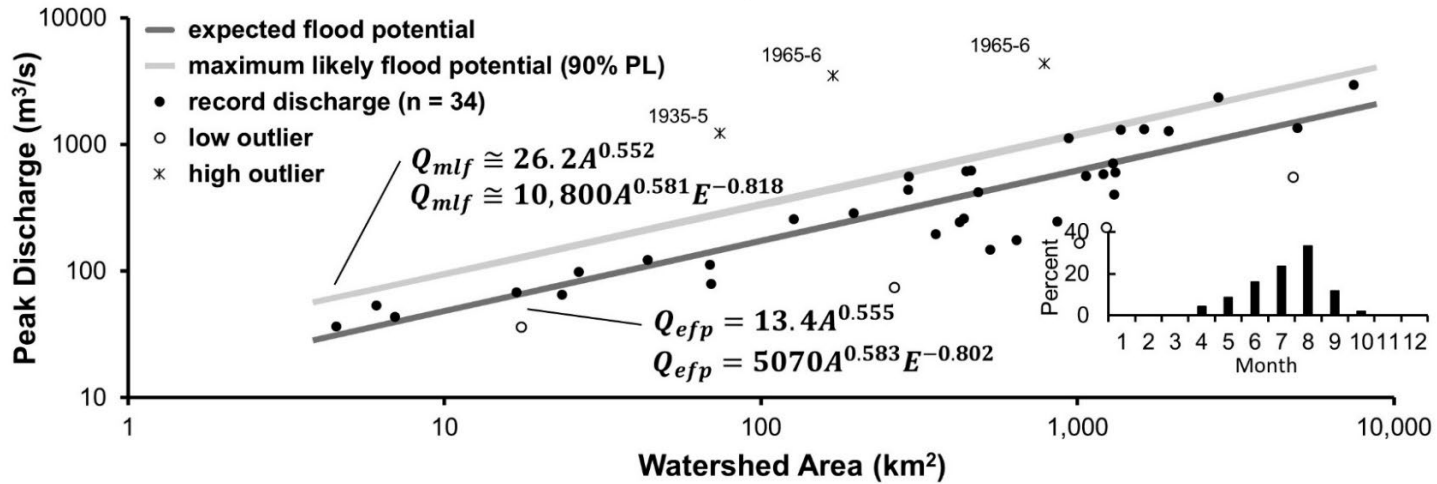


*Flood Potential Plots, Western United States  
Developed by: Steven Yochum*

*U.S. Department of Agriculture, Forest Service  
National Stream and Aquatic Ecology Center*

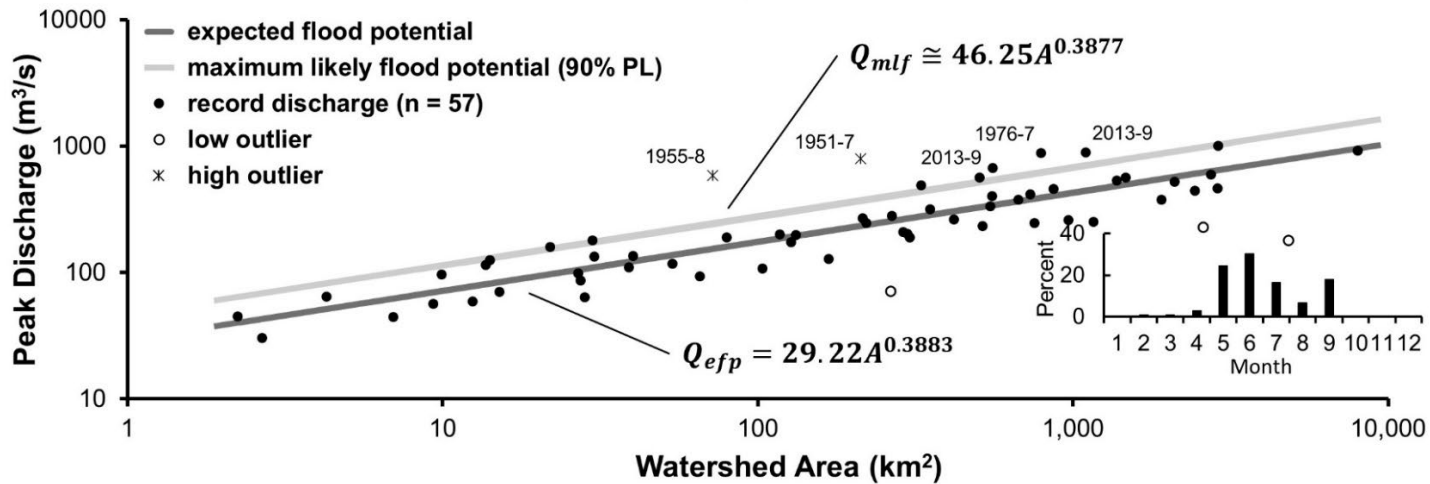
**Zone 1S: Eastern Slopes and Great Plains, South ( $P_f = 12.6$ )**

$R^2 = 0.83; 0.85$



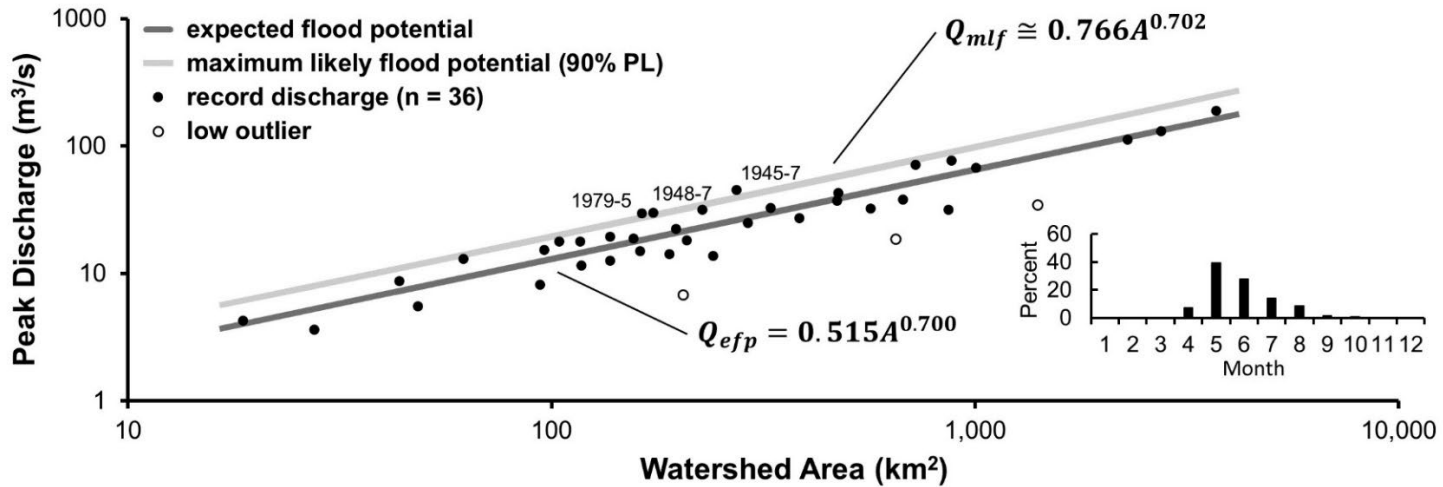
**Zone 1N: Eastern Slopes and Great Plains, North ( $P_f = 12.9$ )**

$R^2 = 0.84$



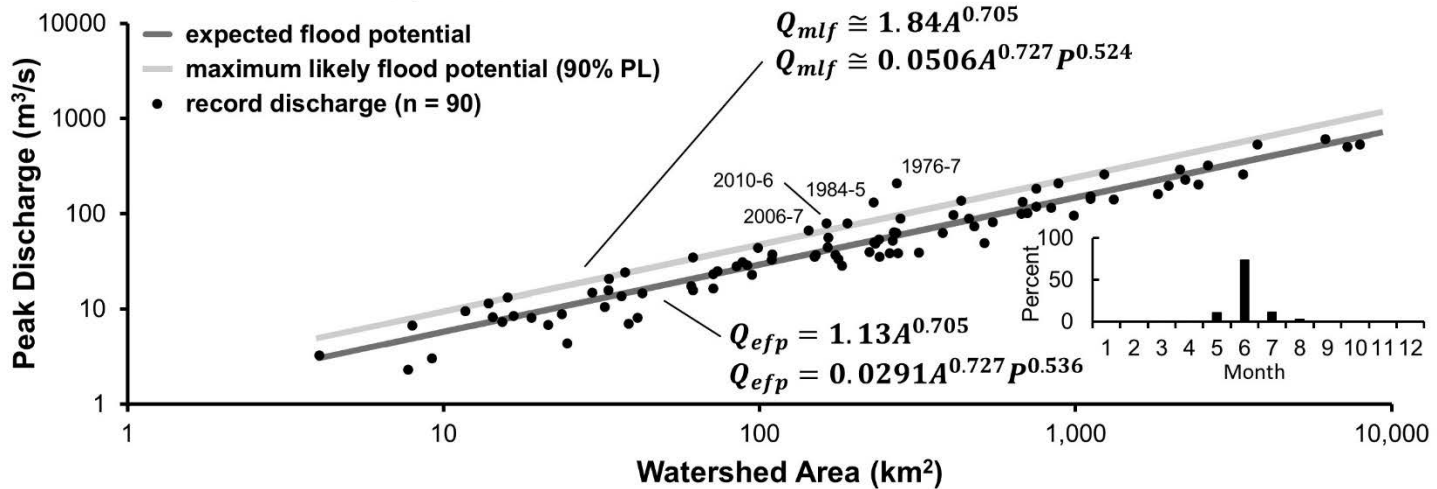
**Zone 2: Orographic Sheltered ( $P_f = 1.0$ )**

$R^2 = 0.89$



**Zone 3: Southern Rockies ( $P_f = 2.3$ )**

$R^2 = 0.92; 0.92$

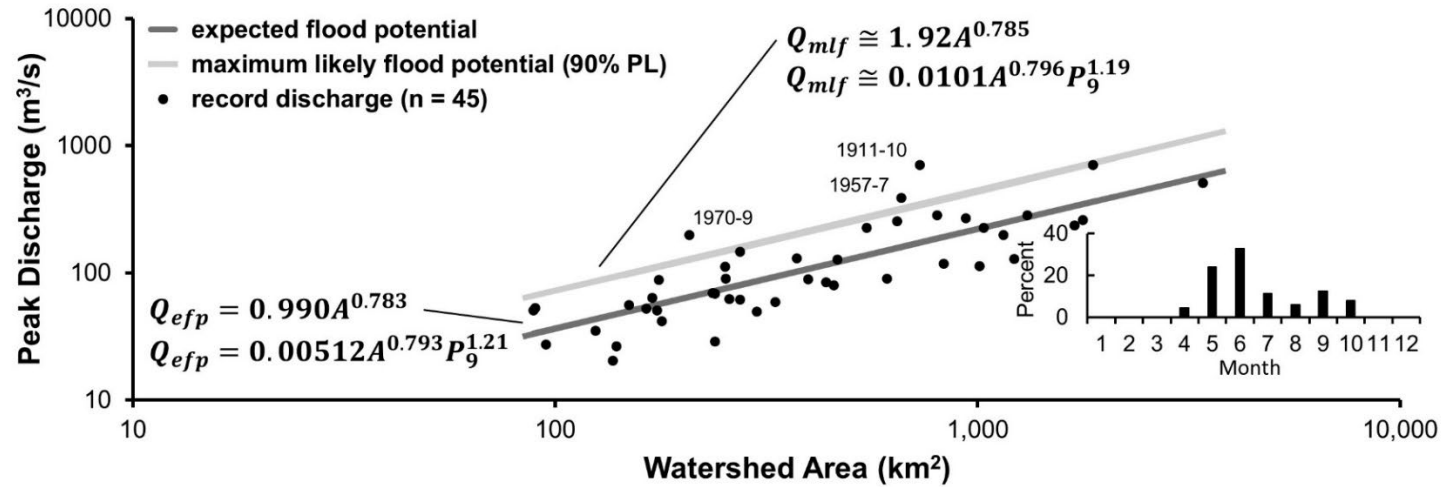


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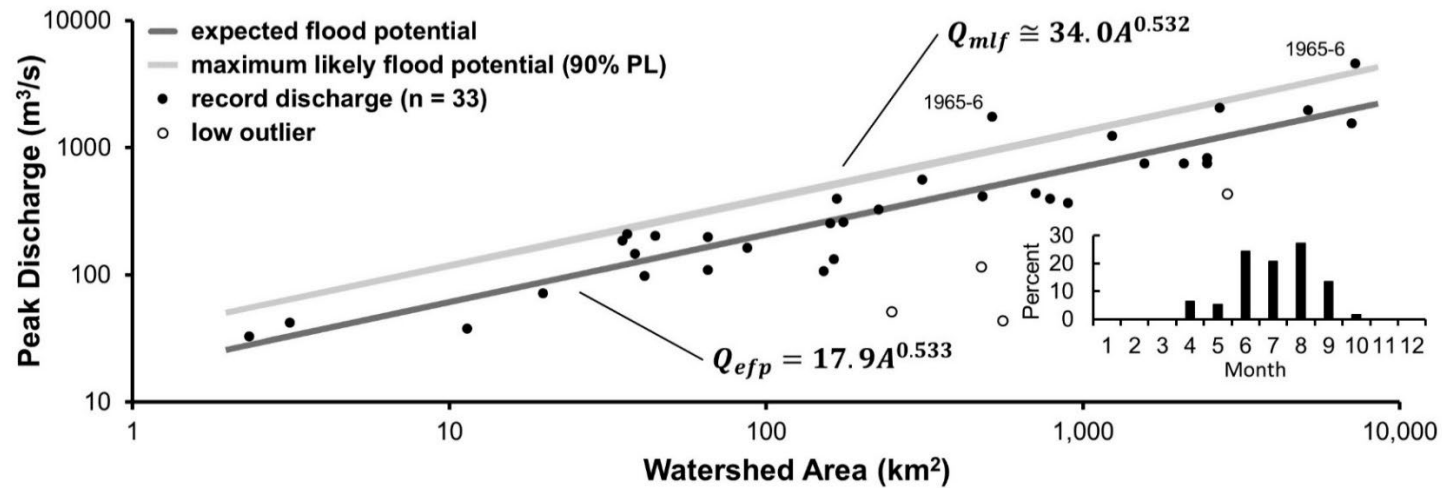
**Zone 3S: Southern Rockies, South ( $P_f = 3.0$ )**

$R^2 = 0.66; 0.74$



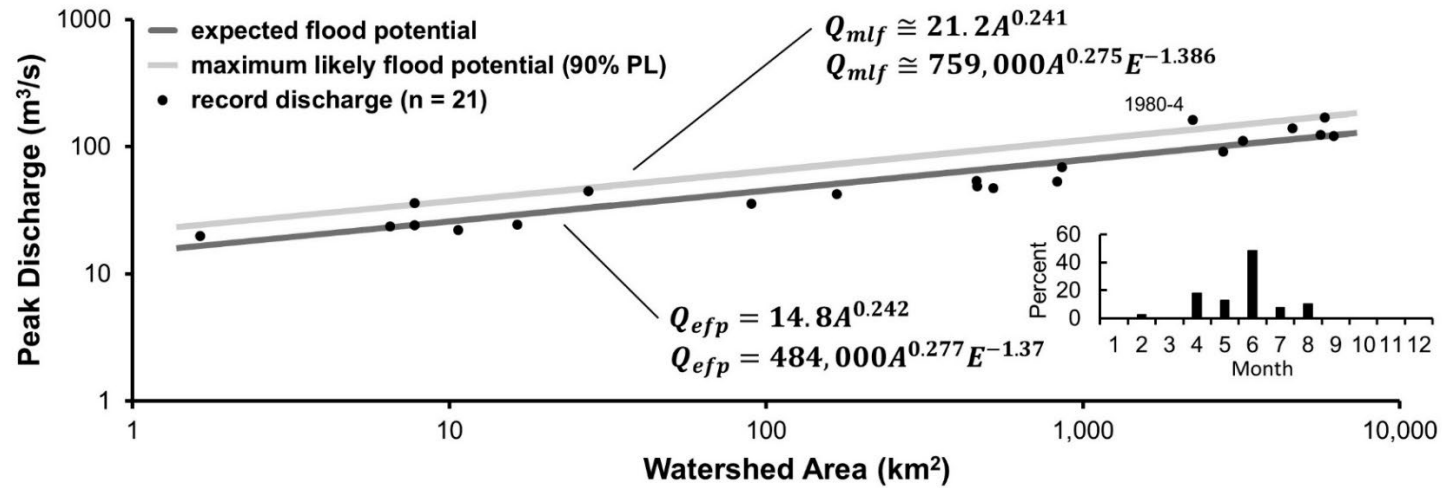
**Zone 4: Southern Transition ( $P_f = 15.1$ )**

$R^2 = 0.85$



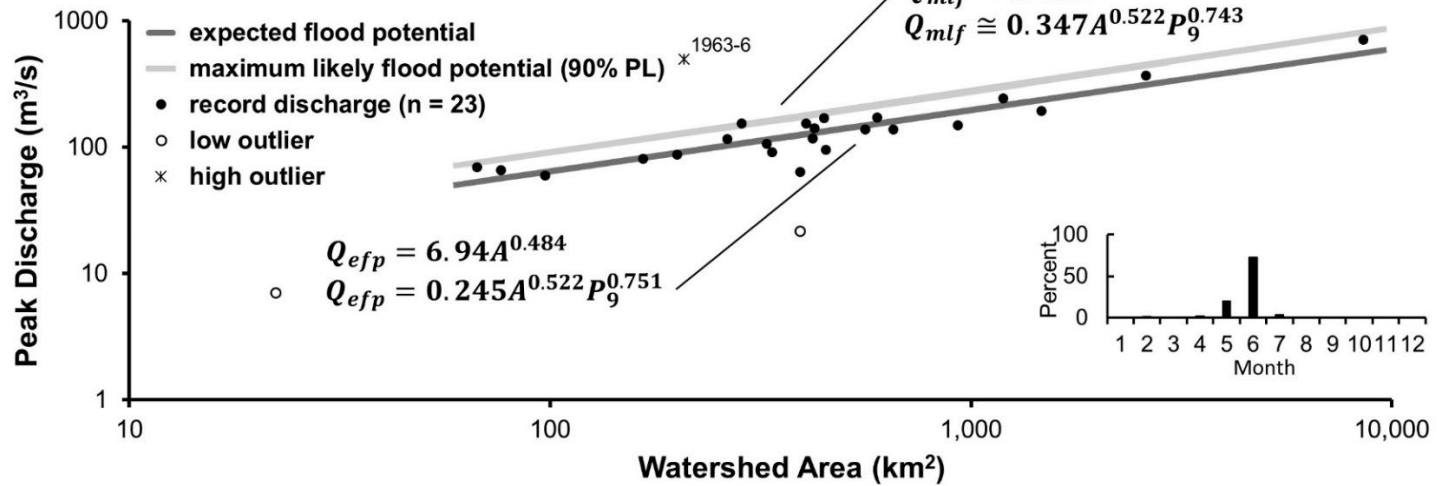
**Zone 6: Wyoming Basin ( $P_f = 3.6$ )**

$R^2 = 0.87; 0.90$



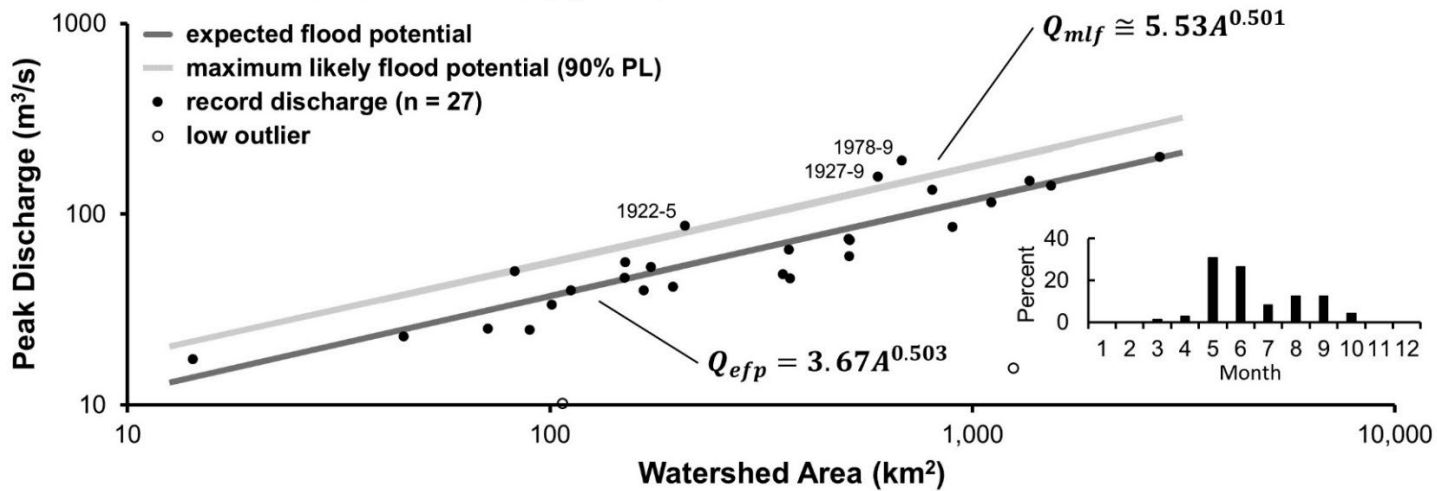
**Zone 7: Northwest Mountains ( $P_f = 4.7$ )**

$R^2 = 0.80; 0.83$



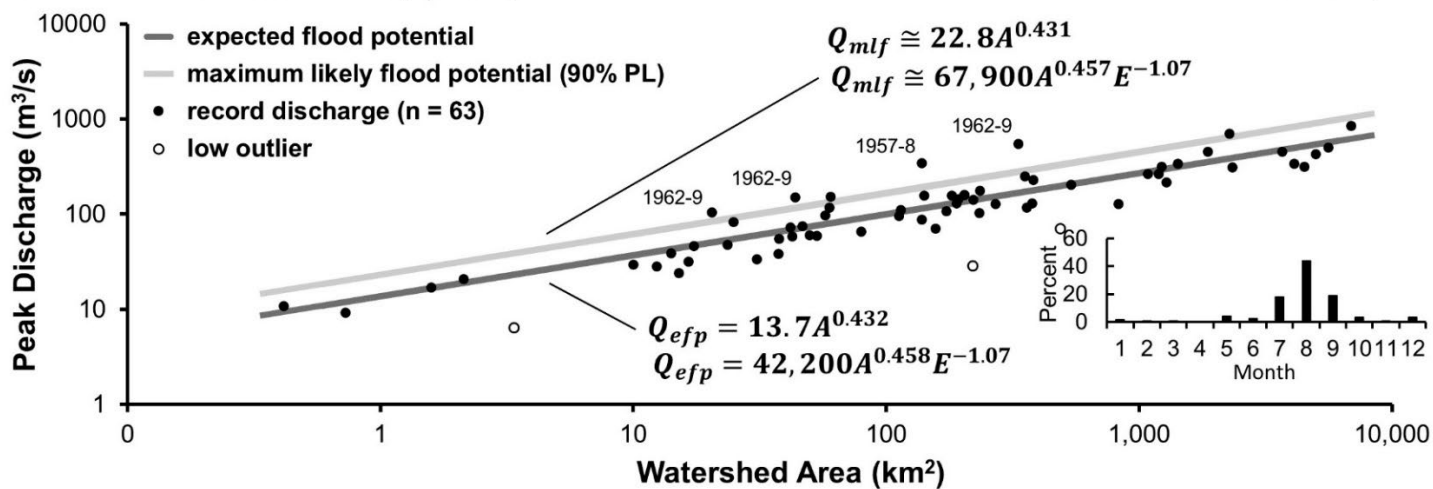
**Zone 8T: Colorado Plateau Transition ( $P_f = 2.7$ )**

$R^2 = 0.82$



**Zone 8: Colorado Plateaus ( $P_f = 7.3$ )**

$R^2 = 0.85; 0.89$

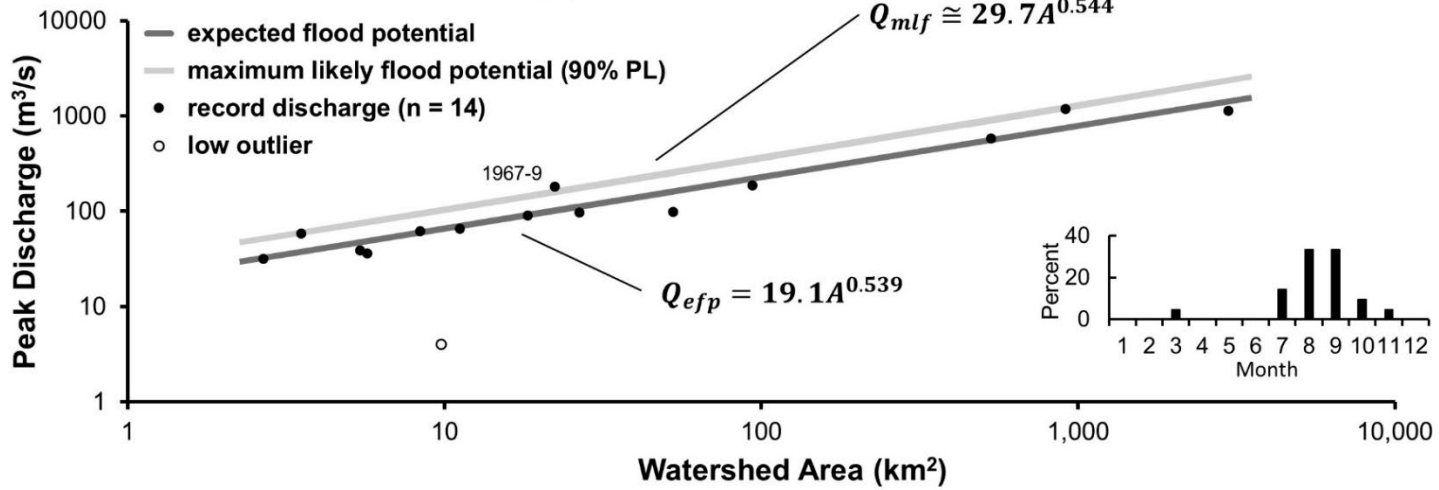


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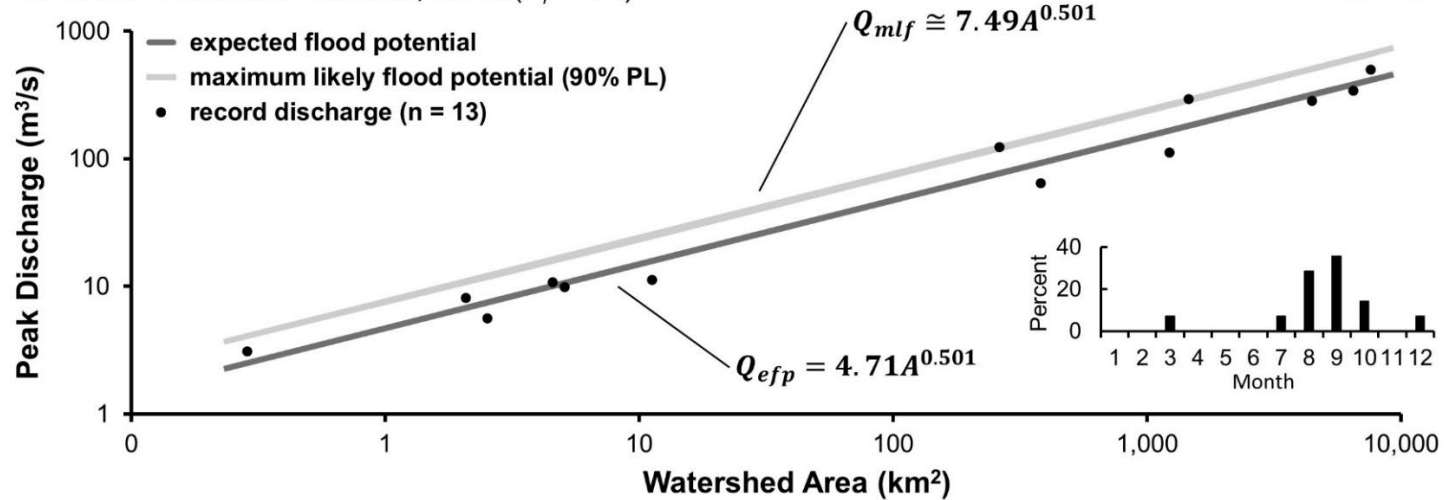
**Zone 8C: Colorado Plateaus, Central ( $P_f = 16.6$ )**

$R^2 = 0.94$



**Zone 8W: Colorado Plateaus, West ( $P_f = 3.4$ )**

$R^2 = 0.97$

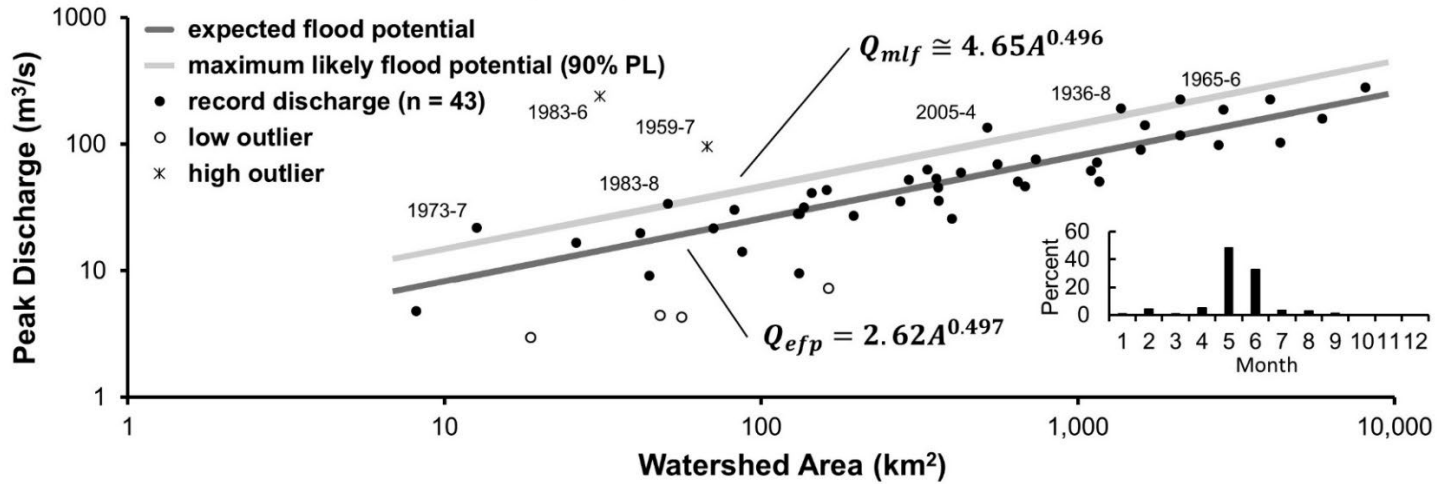


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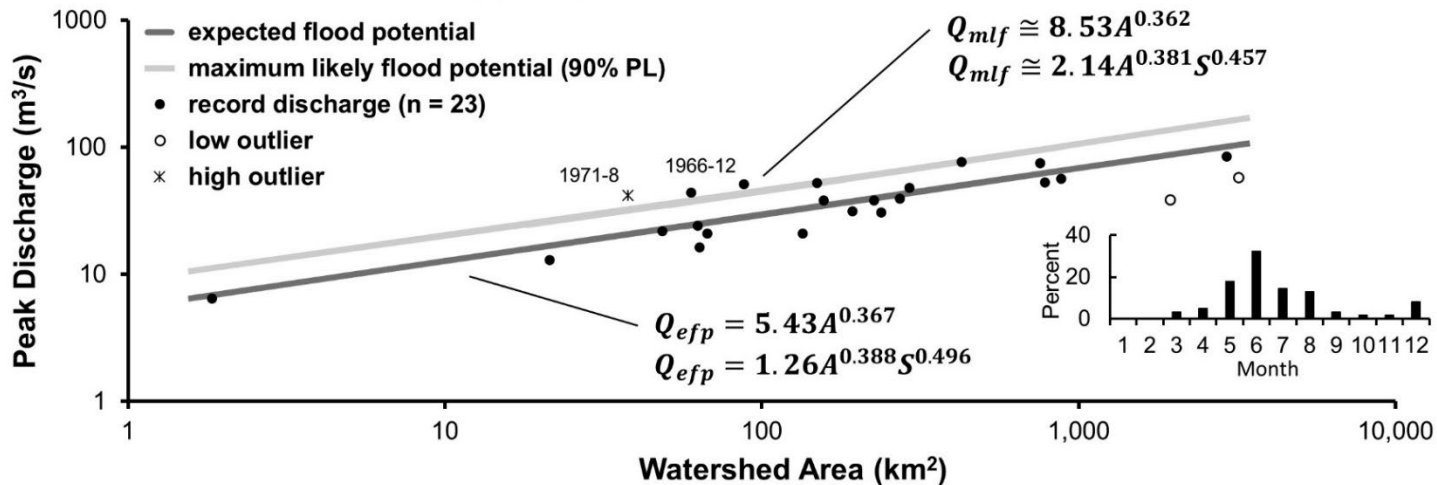
**Zone 9: Wasatch and West Basins ( $P_f = 1.9$ )**

$R^2 = 0.79$



**Zone 11: Great Basin Transition ( $P_f = 2.2$ )**

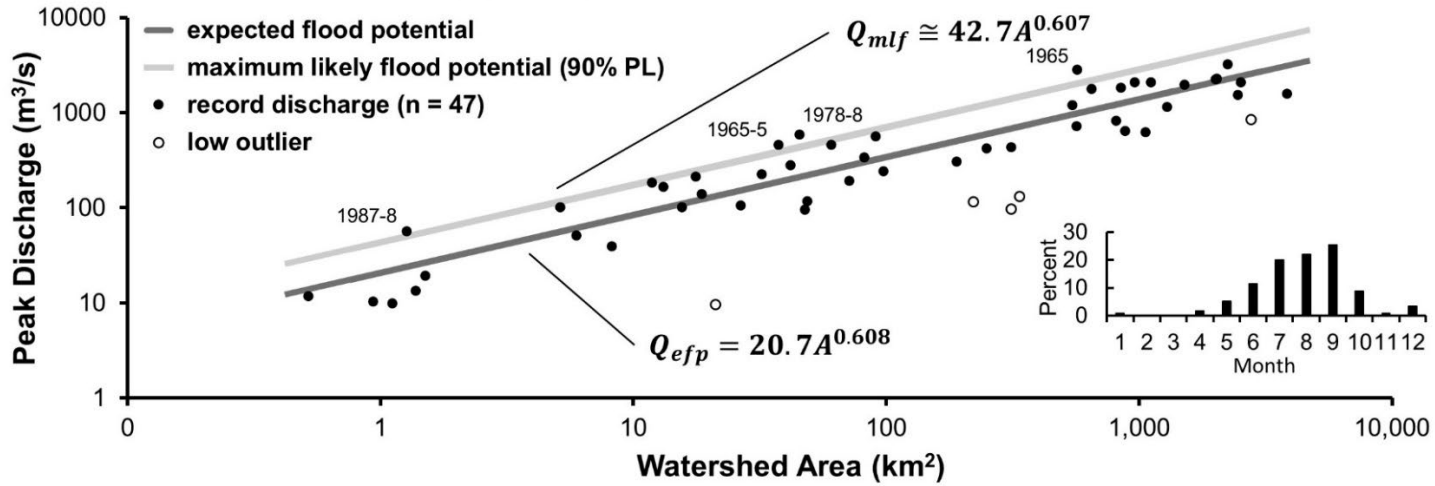
$R^2 = 0.77; 0.82$





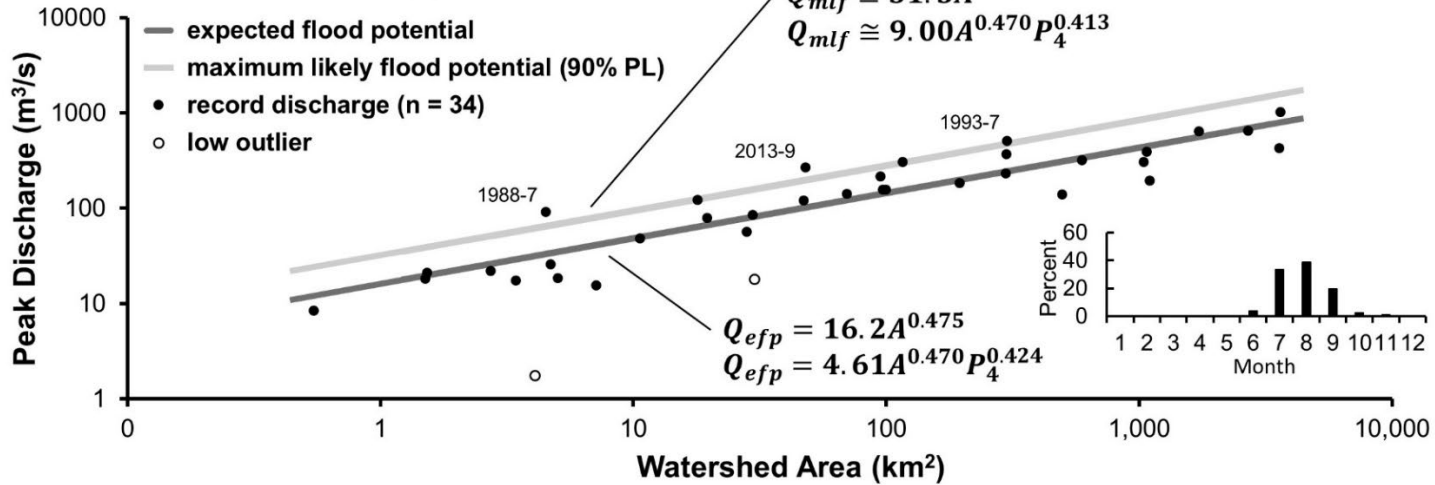
**Zone 13: Southwest Transition ( $P_f = 25.1$ )**

$R^2 = 0.89$



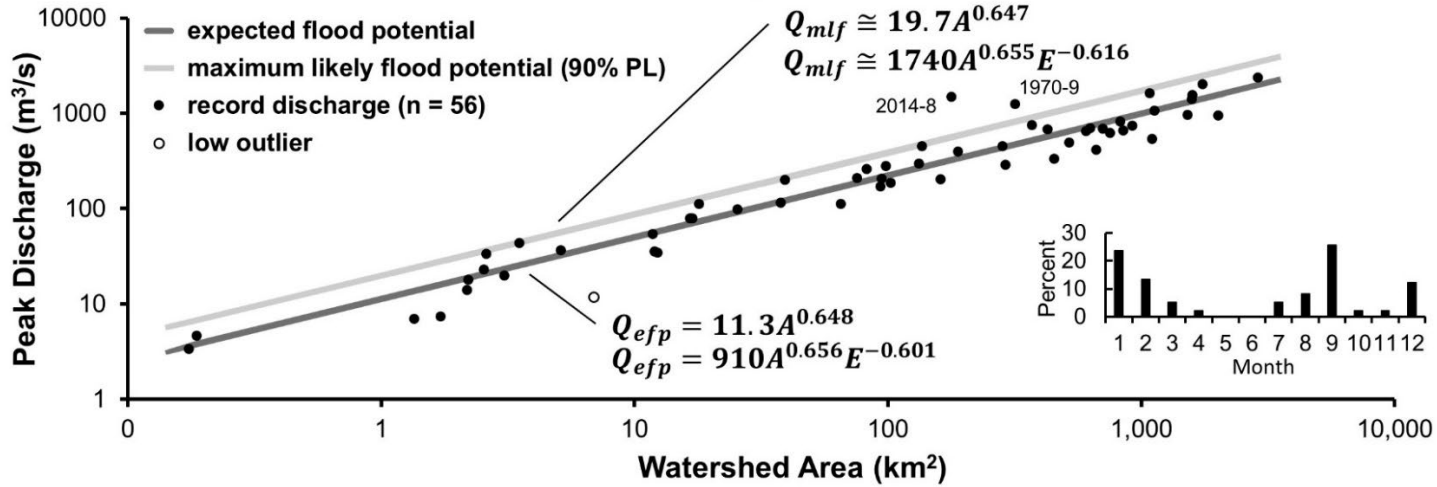
**Zone 15: Rio Grande Basin ( $P_f = 10.5$ )**

$R^2 = 0.85; 0.87$



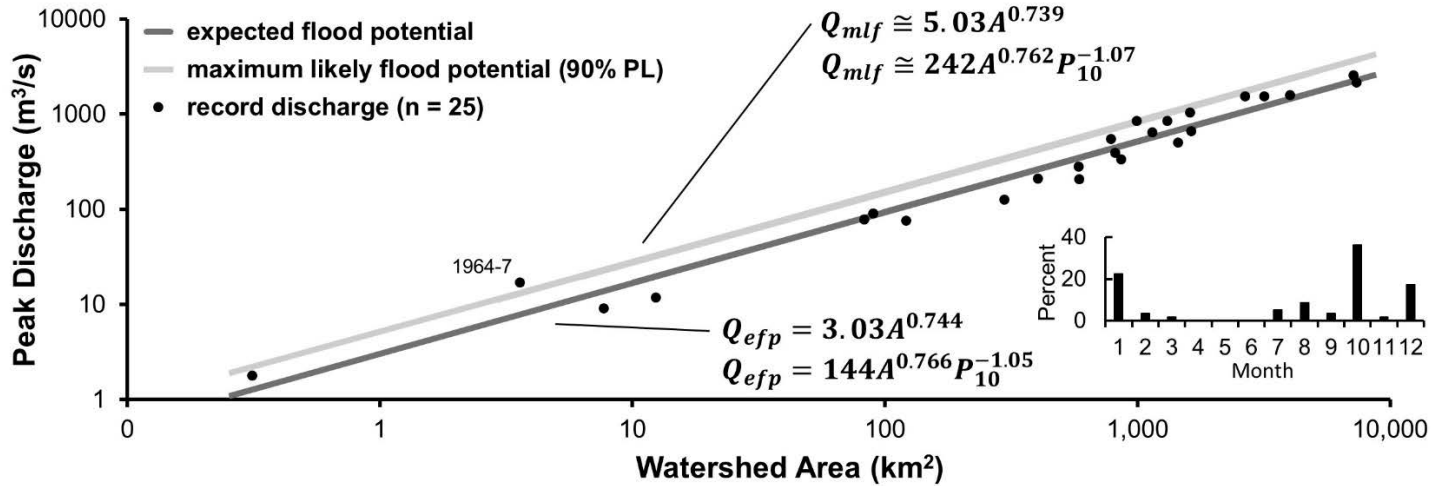
**Zone 16: Mexican Highlands (Mogollon Rim Area) ( $P_f = 16.8$ )**

$R^2 = 0.94; 0.94$



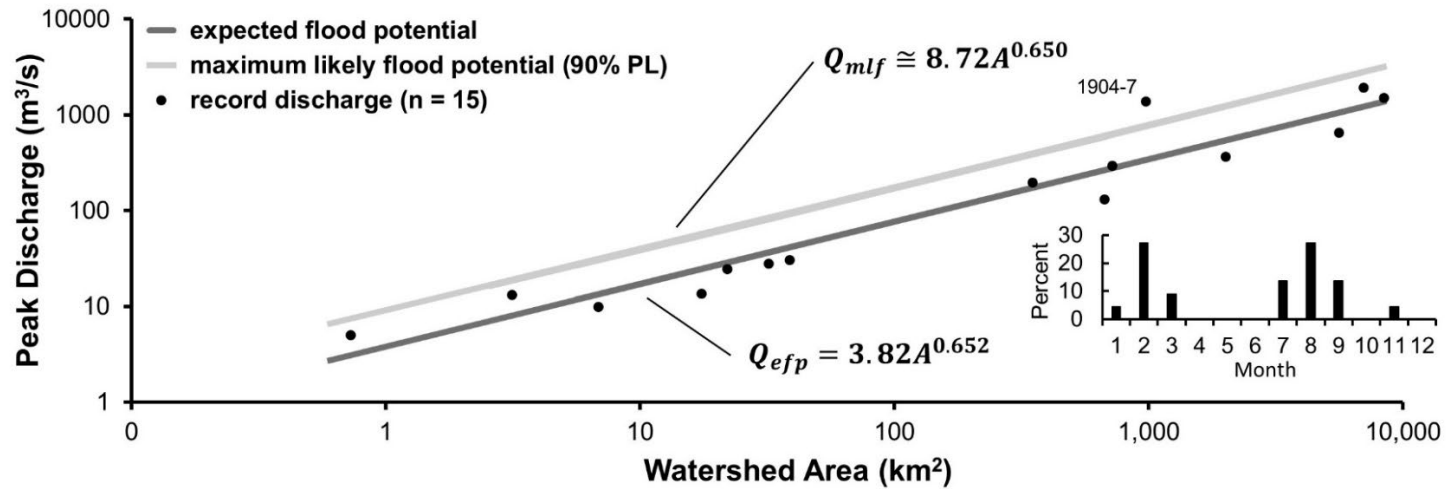
**Zone 16E: Mexican Highlands, East ( $P_f = 7.5$ )**

$R^2 = 0.97; 0.97$



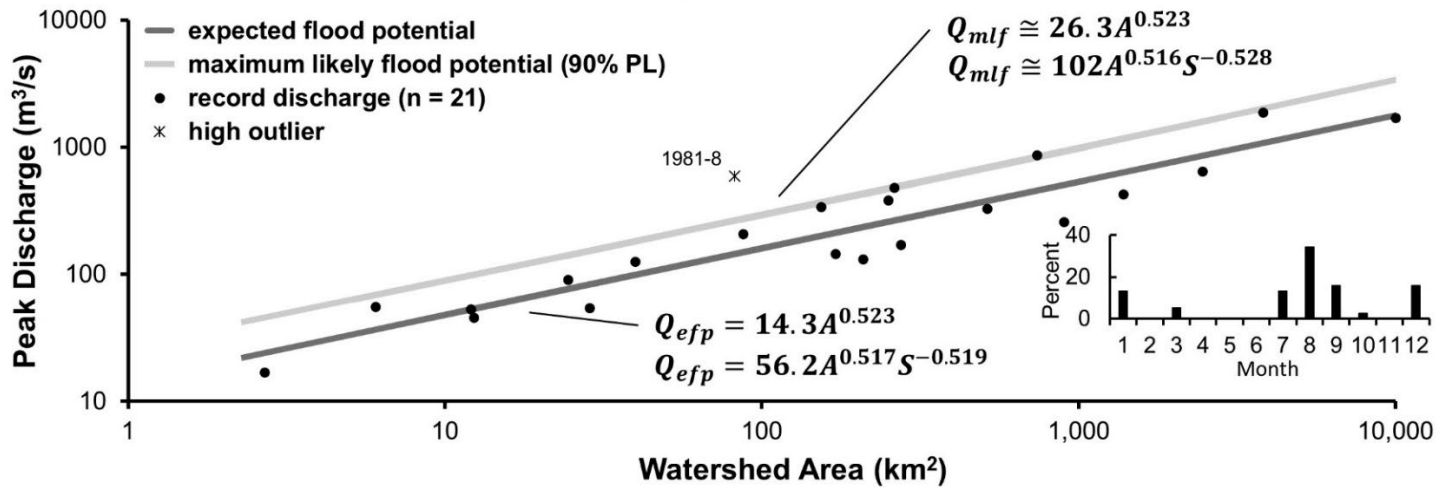
**Zone 16NW: Mexican Highlands, Northwest ( $P_f = 5.8$ )**

$R^2 = 0.92$

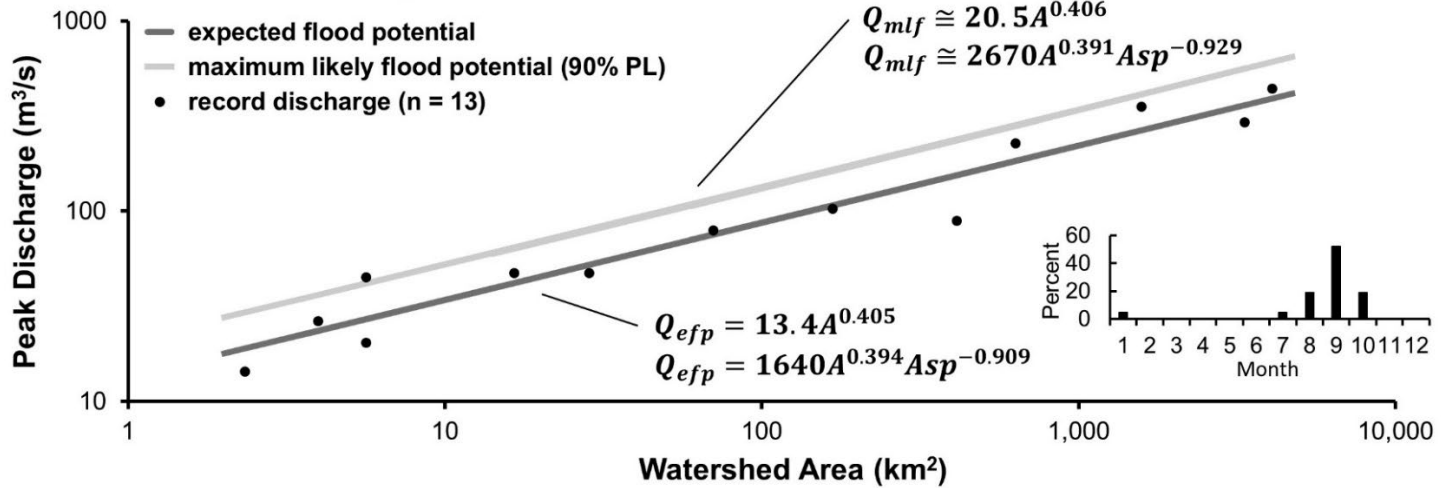


**Zone 17: Colorado Plateaus, West Transition ( $P_f = 11.6$ )**

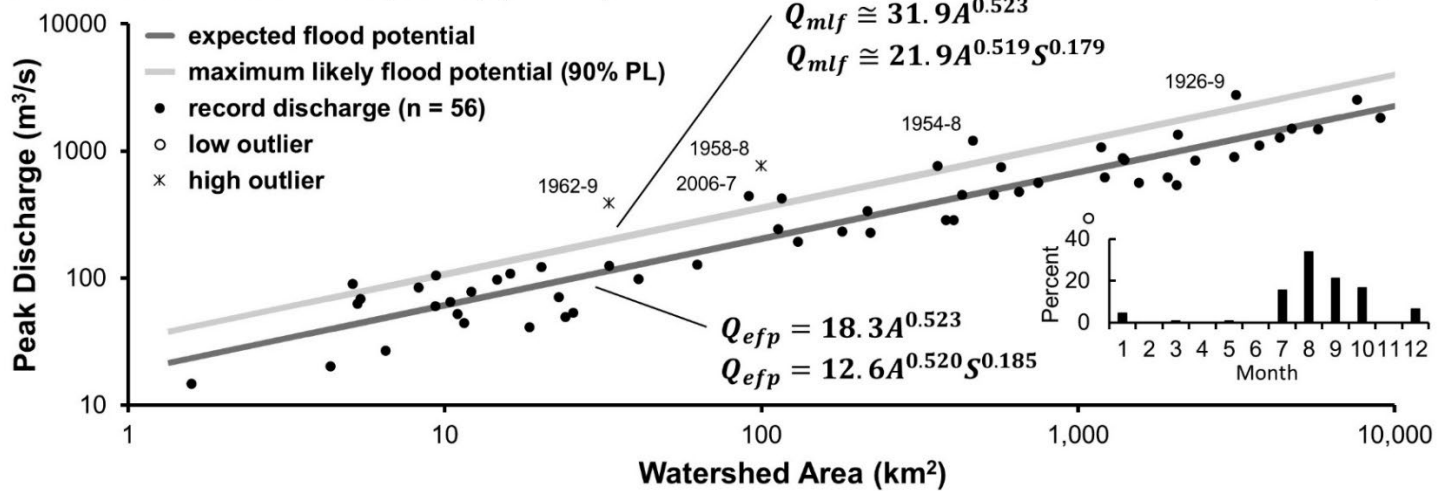
$R^2 = 0.87; 0.89$



**Zone 18: Sonoran Desert ( $P_f = 6.4$ )**

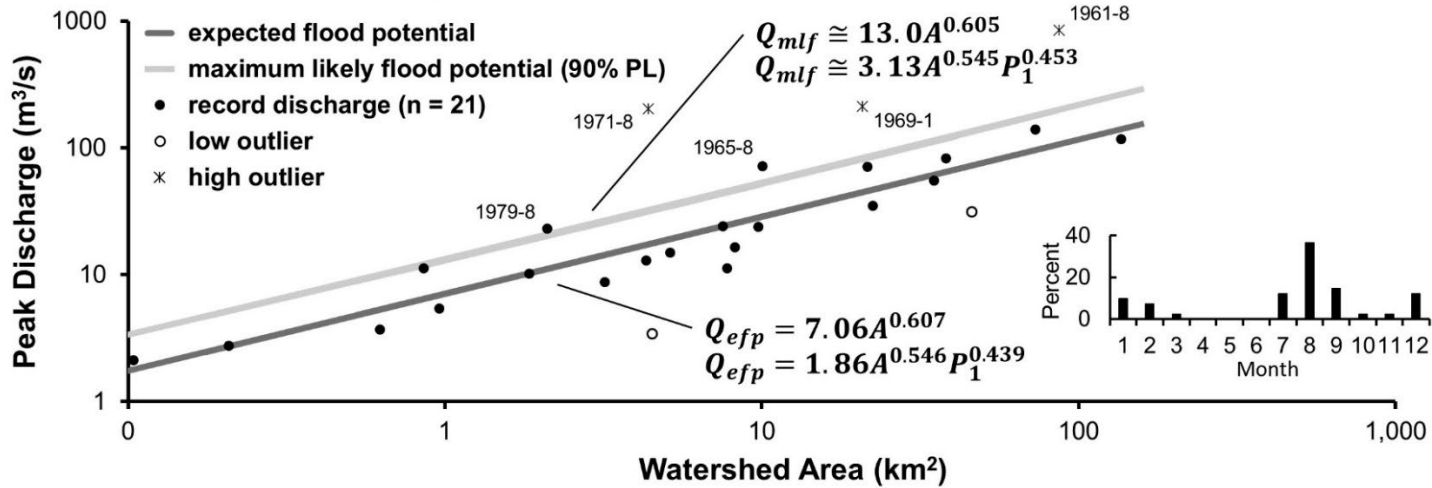


**Zone 18E: Sonoran Desert, East ( $P_f = 14.7$ )**



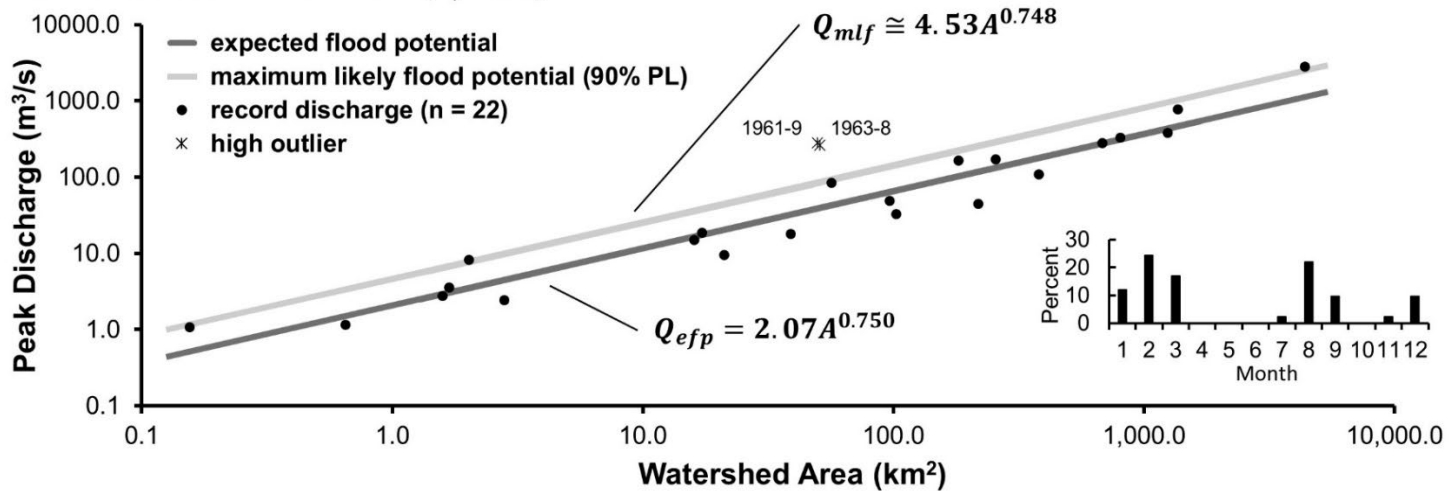
**Zone 18NW: Mojave Desert ( $P_f = 9.4$ )**

$R^2 = 0.87; 0.89$



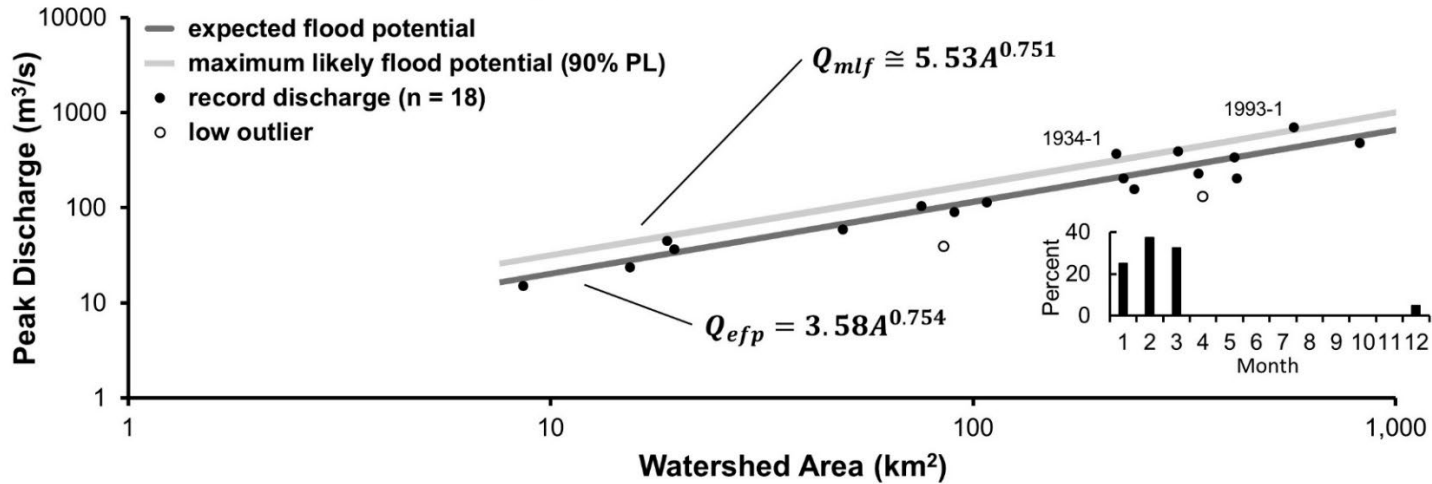
**Zone 18W: Desert Transition ( $P_f = 5.3$ )**

$R^2 = 0.93$



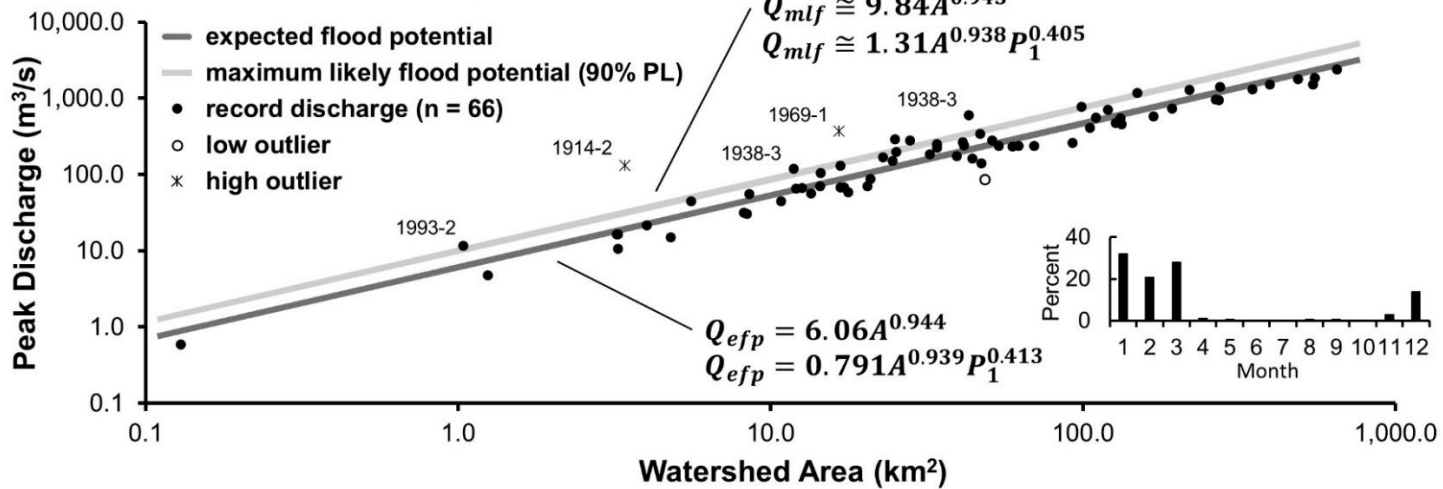
**Zone 19: Pacific Transition Basins ( $P_f = 9.3$ )**

$R^2 = 0.93$



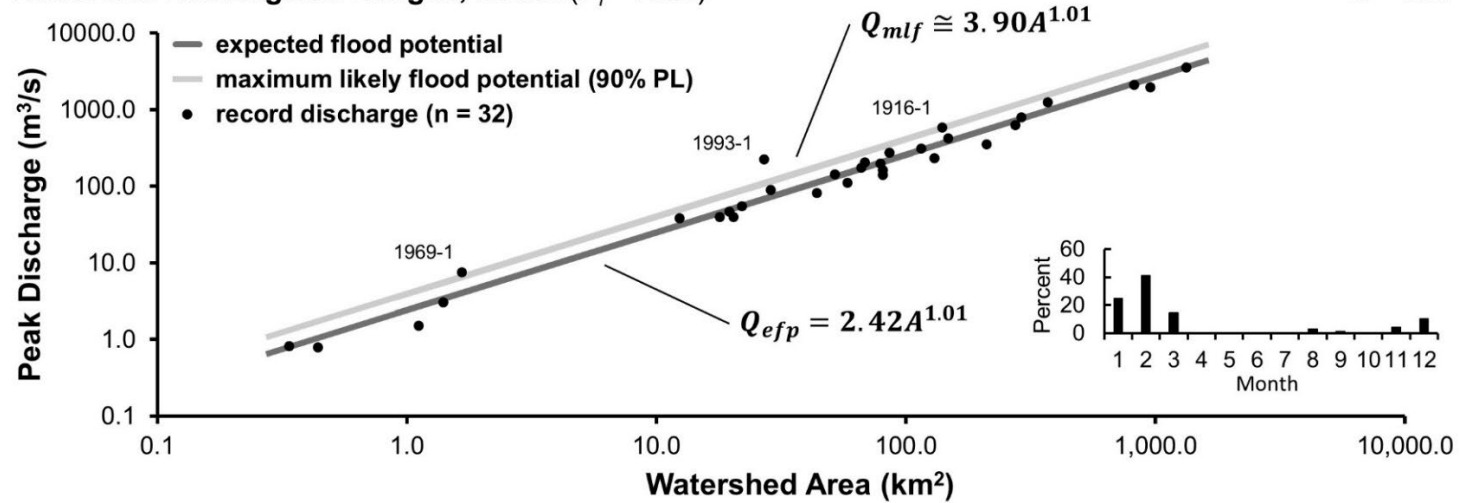
**Zone 20: Los Angeles Ranges ( $P_f = 47.4$ )**

$R^2 = 0.95; 0.95$



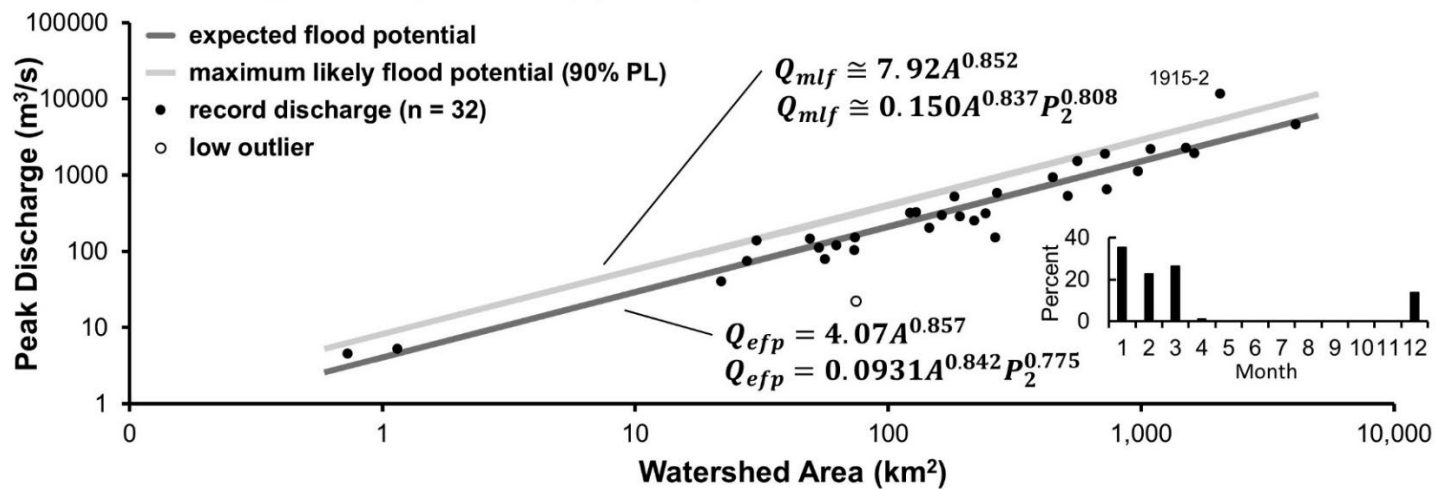
**Zone 20S: Los Angeles Ranges, South ( $P_f = 29.4$ )**

$R^2 = 0.97$



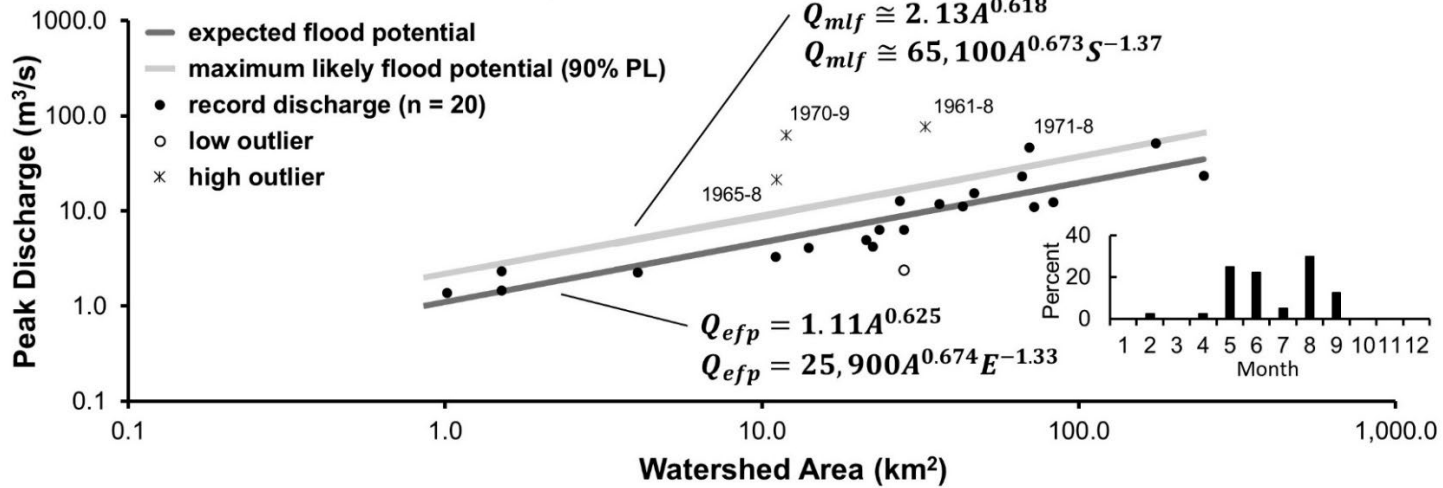
**Zone 20N: Los Angeles Ranges, North ( $P_f = 18.9$ )**

$R^2 = 0.92; 0.93$



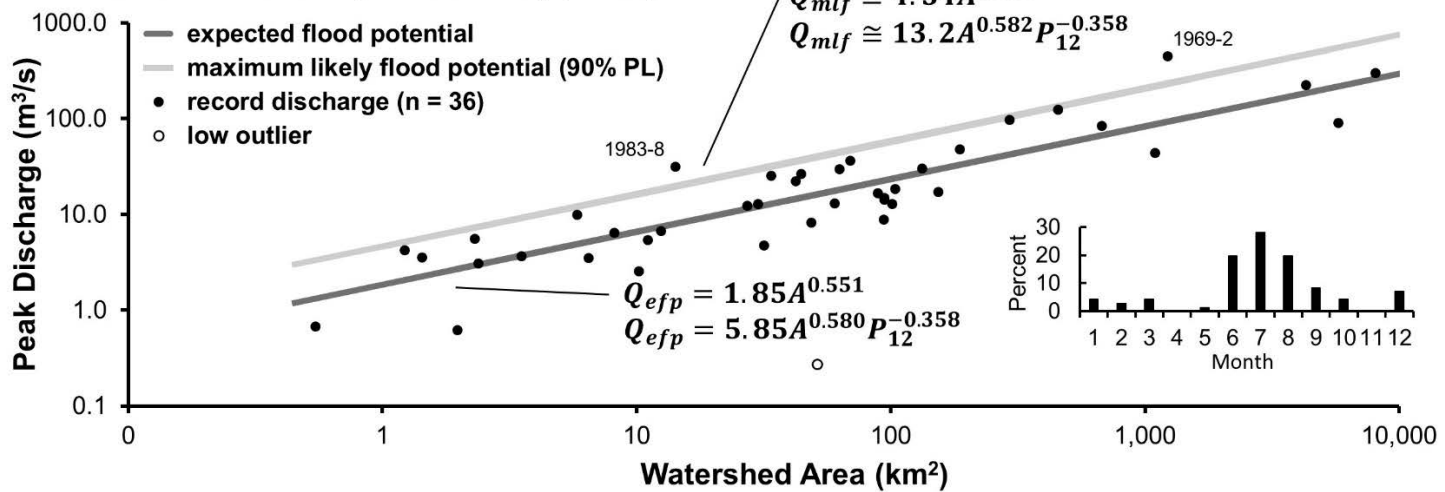
**Zone 21NE: Great Basin, Northeast ( $P_f = 1.5$ )**

$R^2 = 0.82; 0.86$

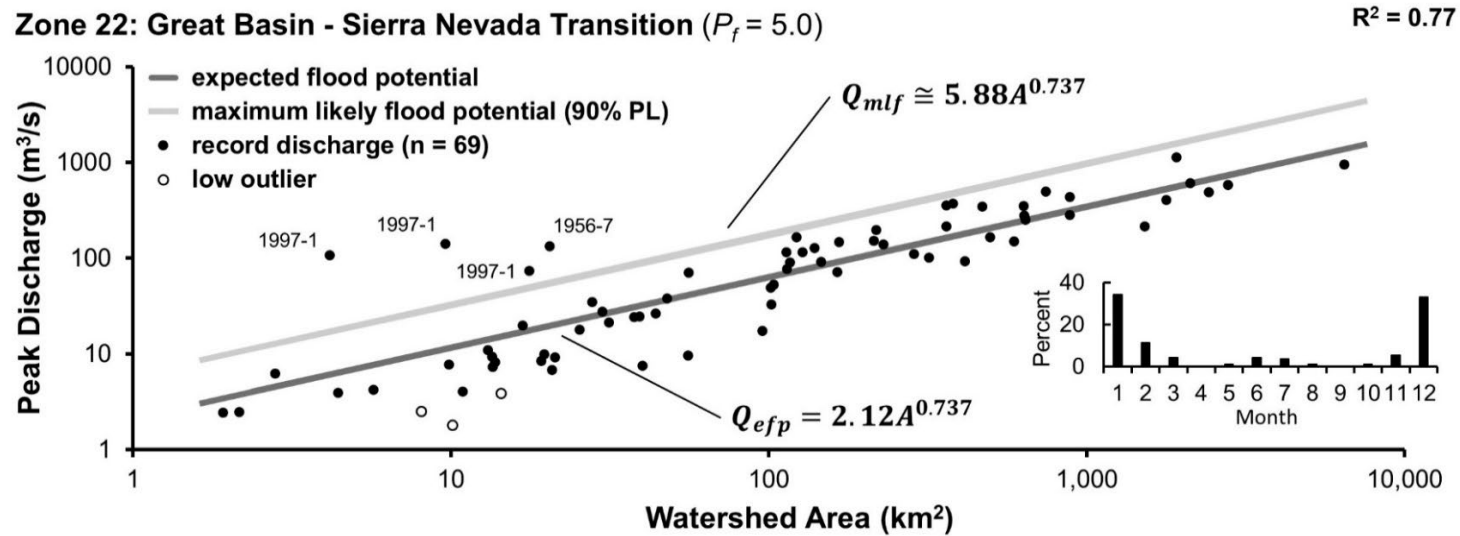
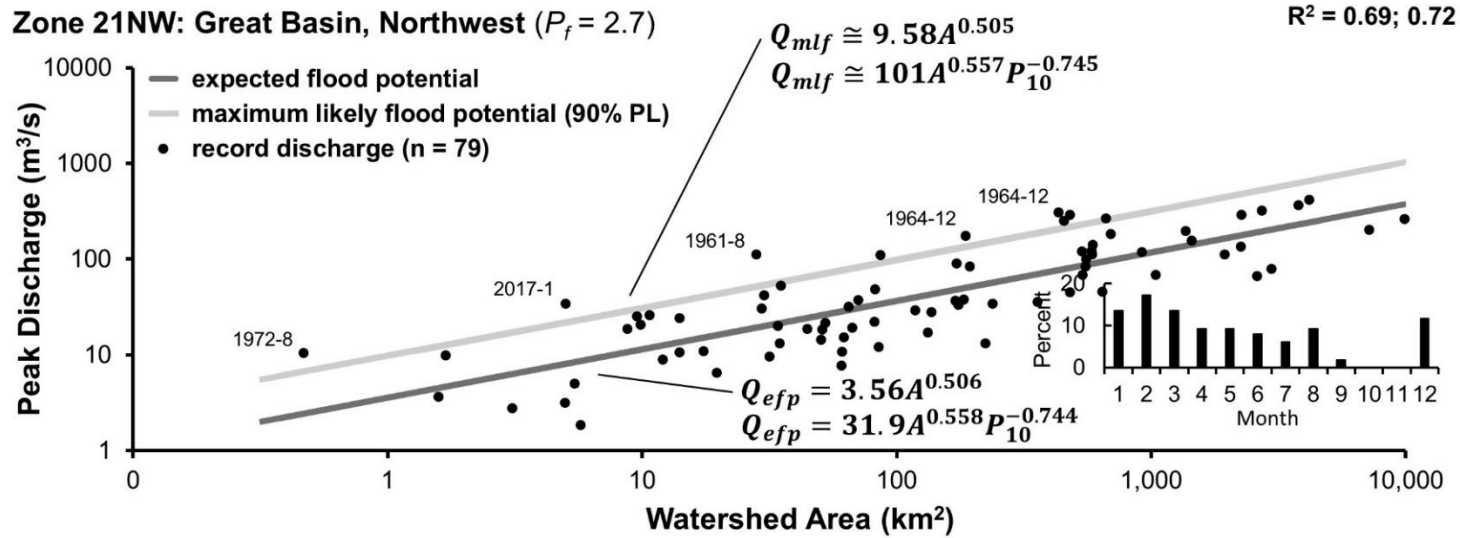


**Zone 21SW: Great Basin, Southwest ( $P_f = 1.7$ )**

$R^2 = 0.80; 0.83$

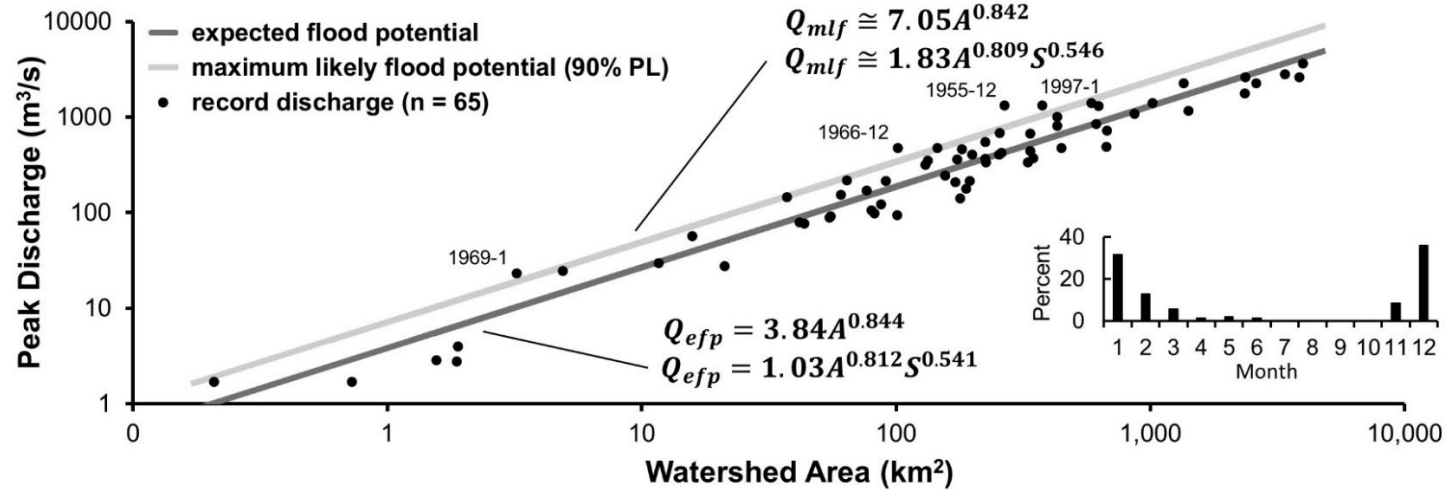






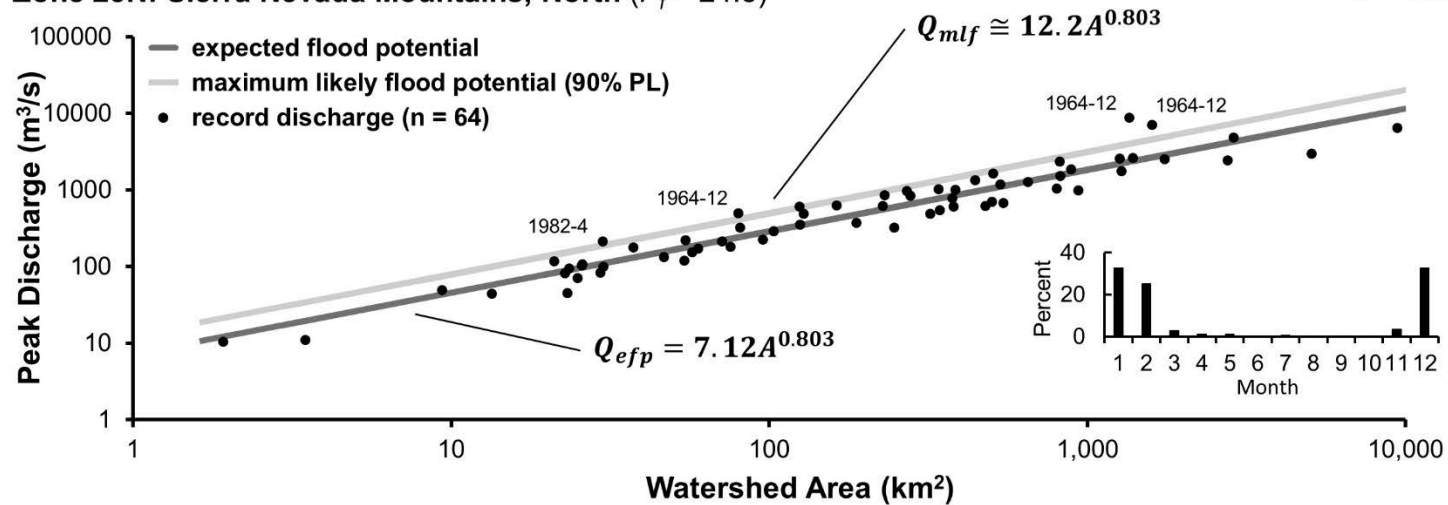
**Zone 23: Sierra Nevada Mountains, Lower Elevations ( $P_f = 16.6$ )**

$R^2 = 0.94; 0.94$



**Zone 23N: Sierra Nevada Mountains, North ( $P_f = 24.3$ )**

$R^2 = 0.92$

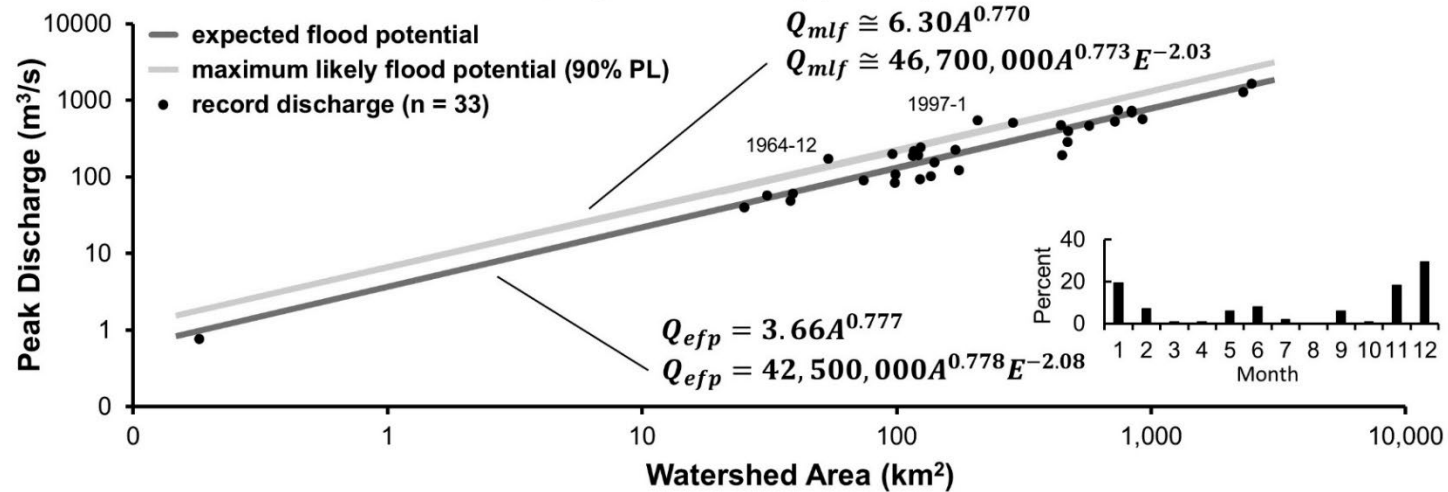


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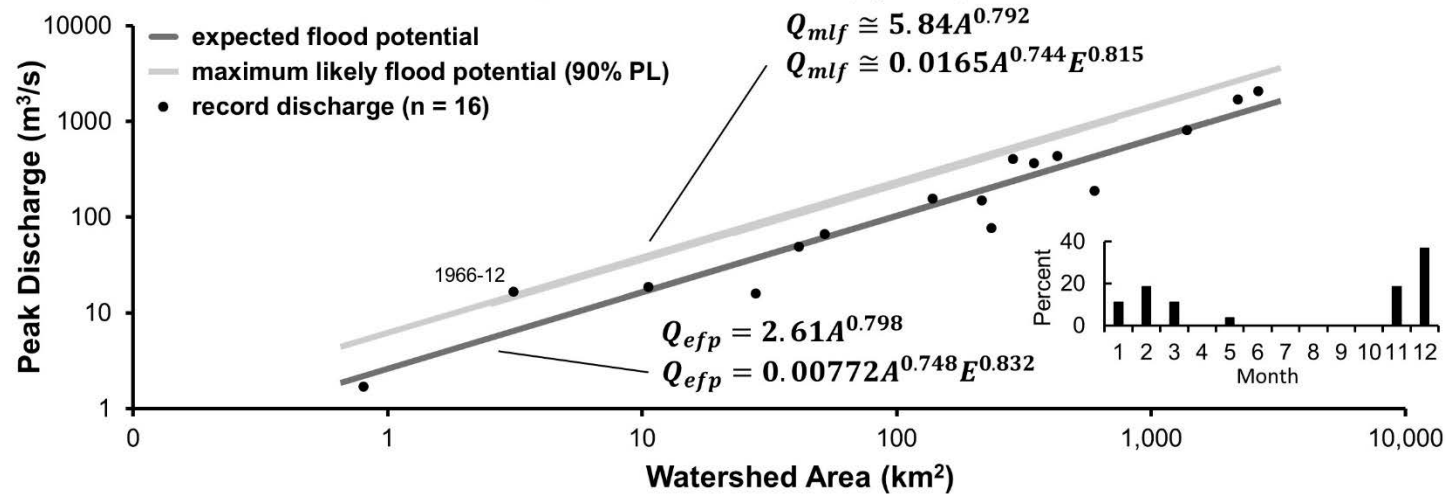
**Zone 23HS: Sierra Nevada Mountains, High Elevations ( $P_f = 10.8$ )**

$R^2 = 0.93; 0.95$



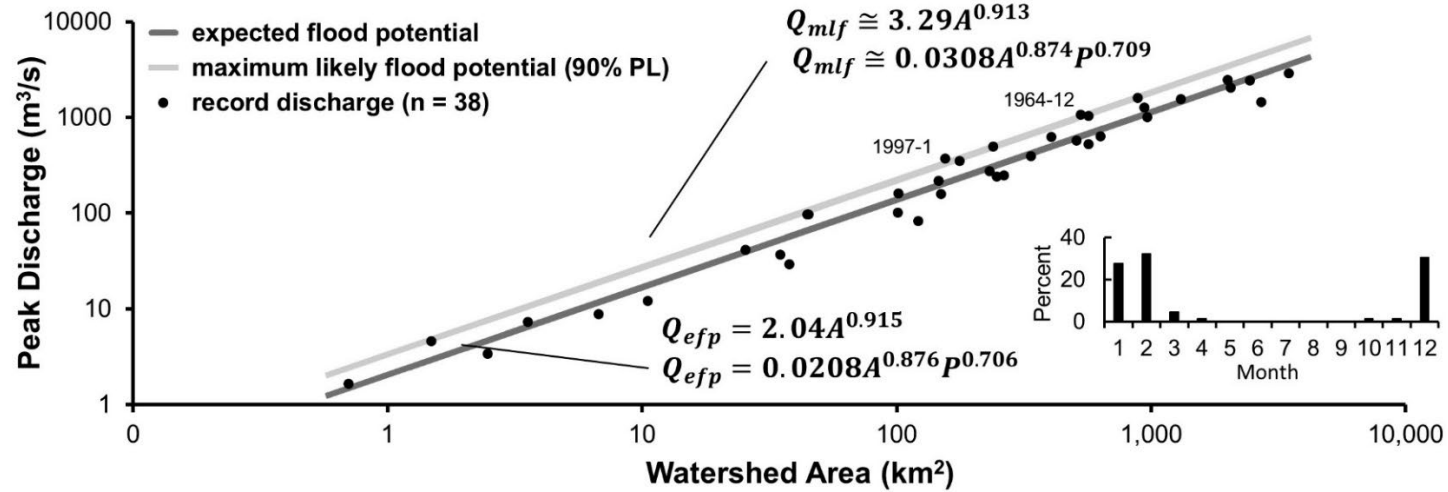
**Zone 23ST: Sierra Nevada Mountains, Southern Transition ( $P_f = 8.7$ )**

$R^2 = 0.92; 0.95$



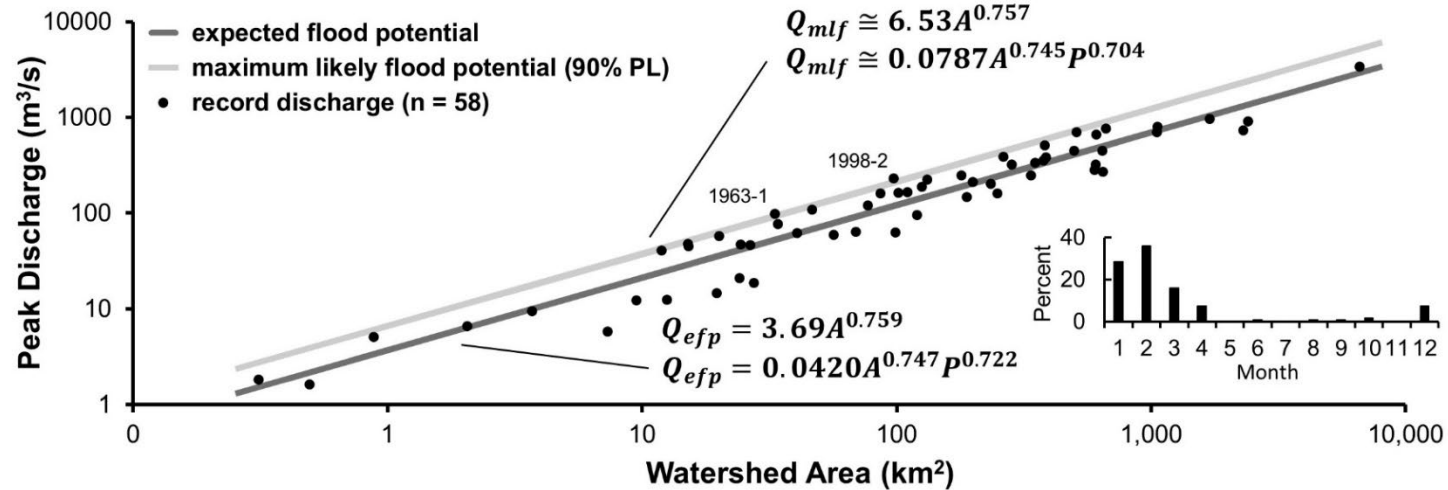
**Zone 24: California Coastal Ranges, Leeward ( $P_f = 13.4$ )**

$R^2 = 0.97; 0.98$



**Zone 24S: California Coastal Ranges, Leeward, South ( $P_f = 9.8$ )**

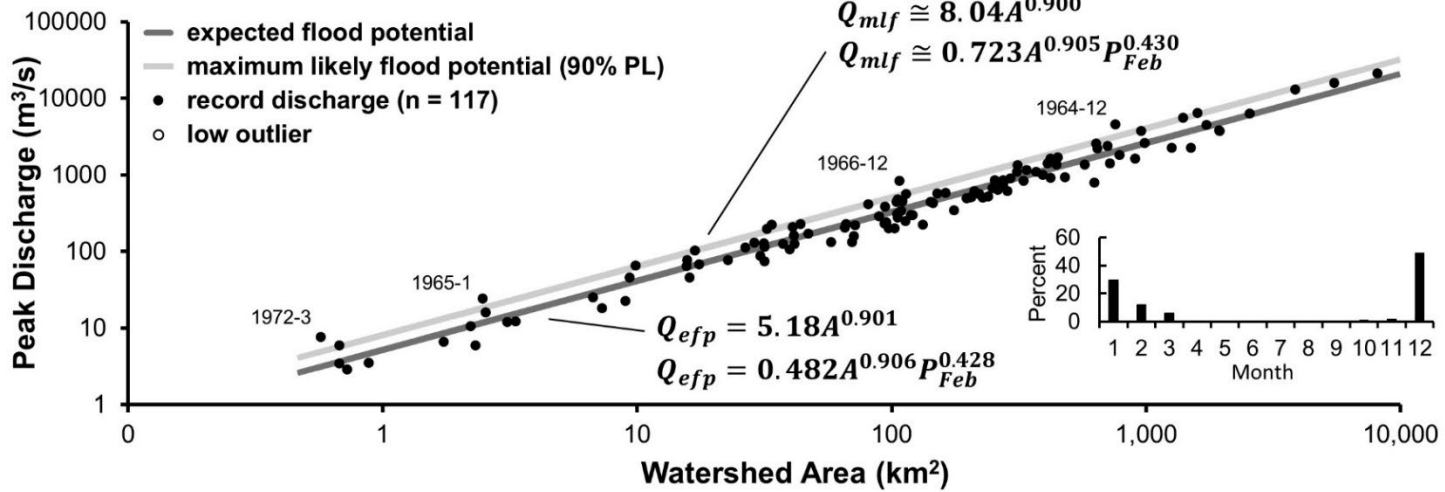
$R^2 = 0.93; 0.95$



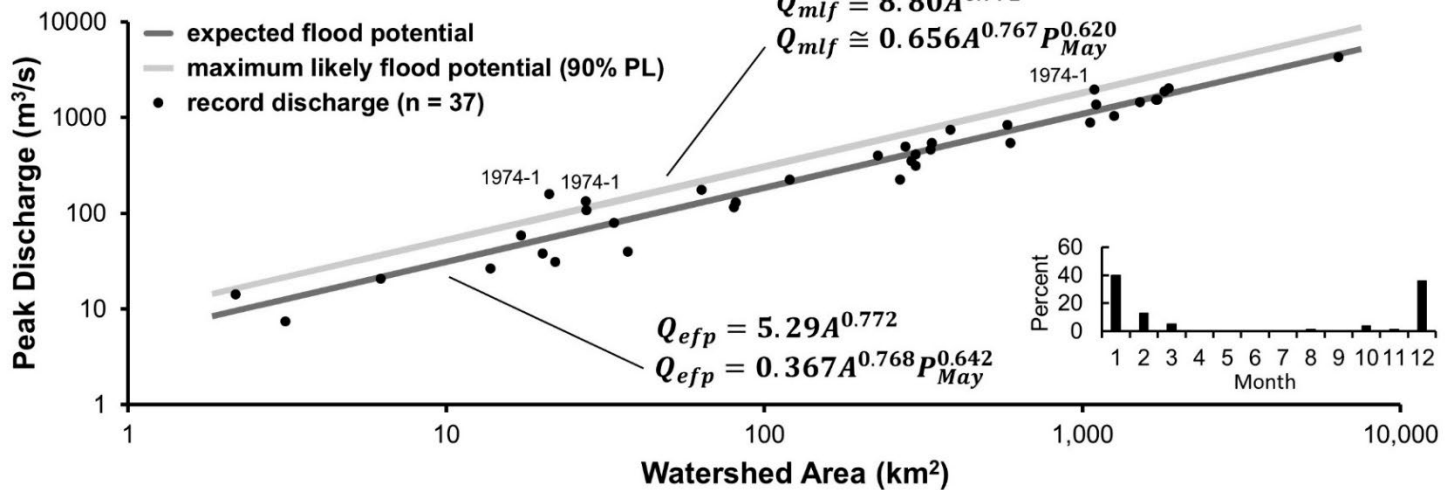
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**Zone 25: California Coastal Ranges ( $P_f = 31.2$ )**

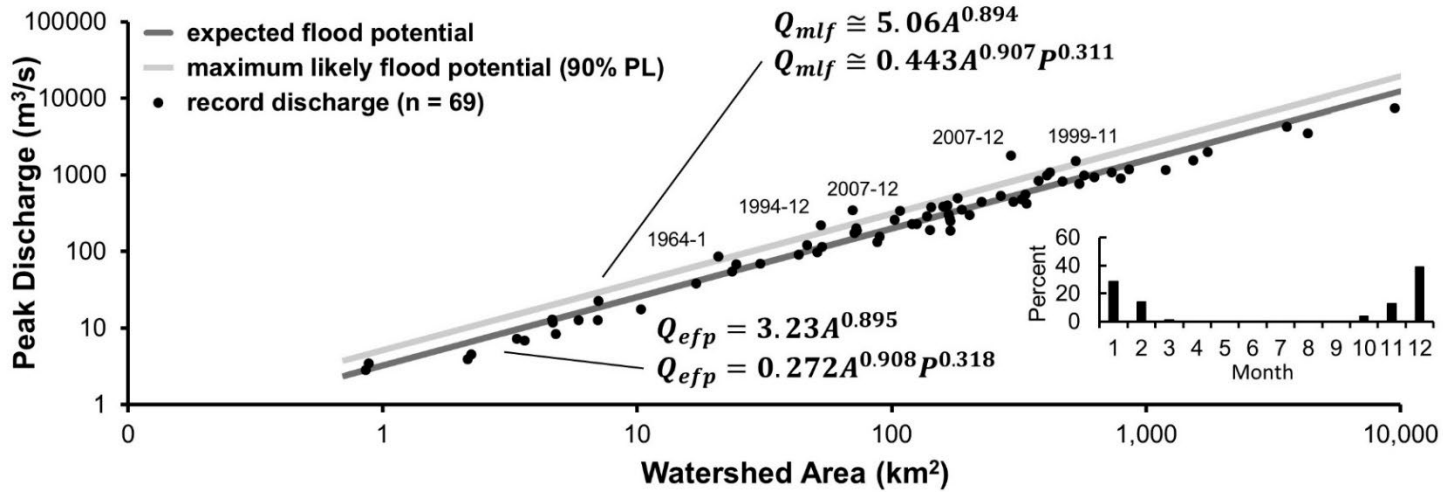


**Zone 26: Eastern Klamath Mountains ( $P_f = 15.1$ )**

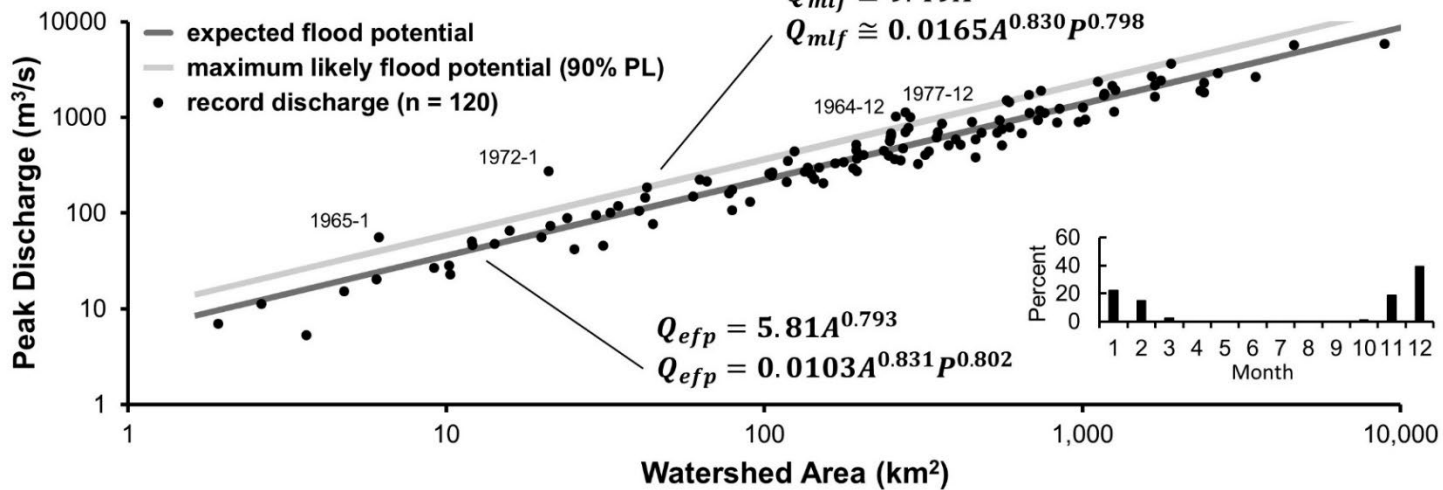


**Zone 27: Oregon and Washington Coast Ranges ( $P_f = 18.8$ )**

$R^2 = 0.97; 0.97$



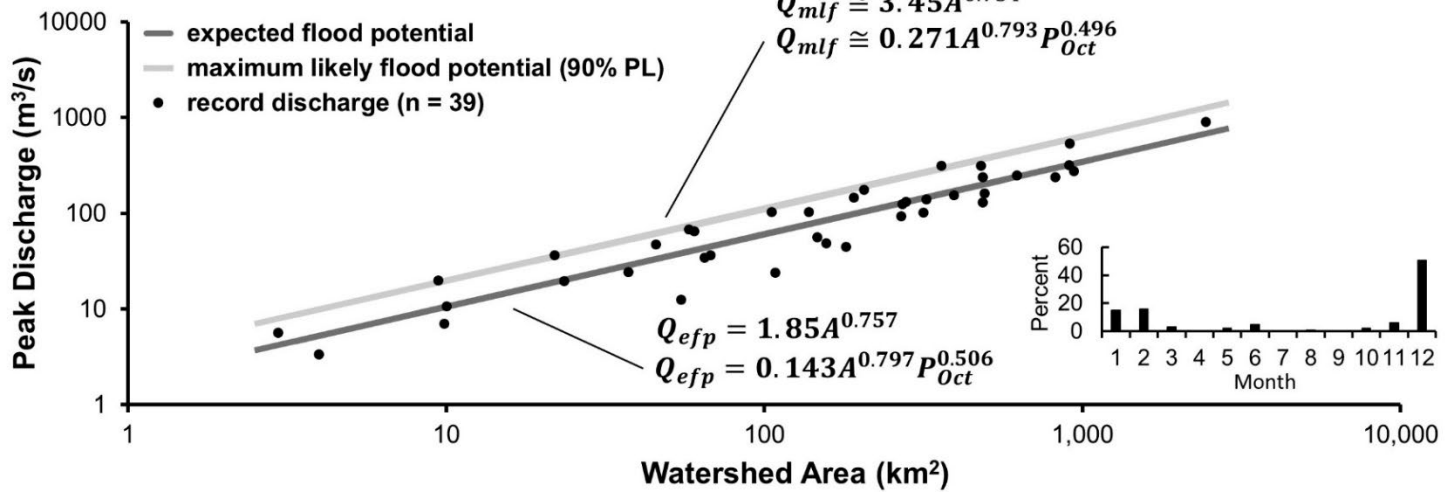
**Zone 28: Cascades, West ( $P_f = 18.7$ )**



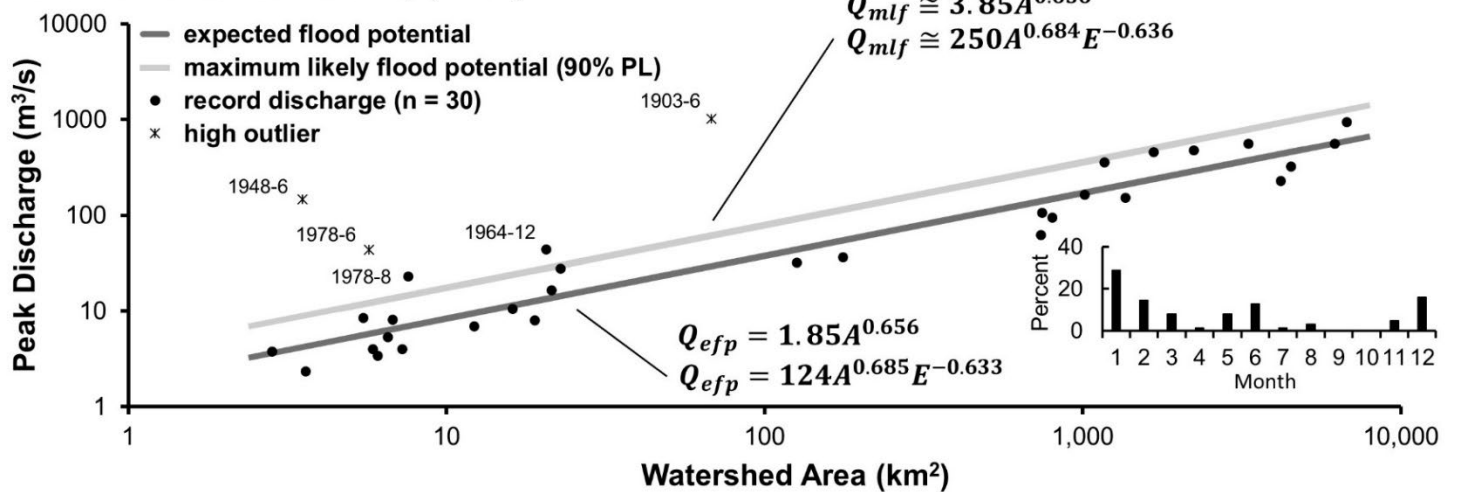
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**Zone 29: Cascades** ( $P_f = 4.9$ )

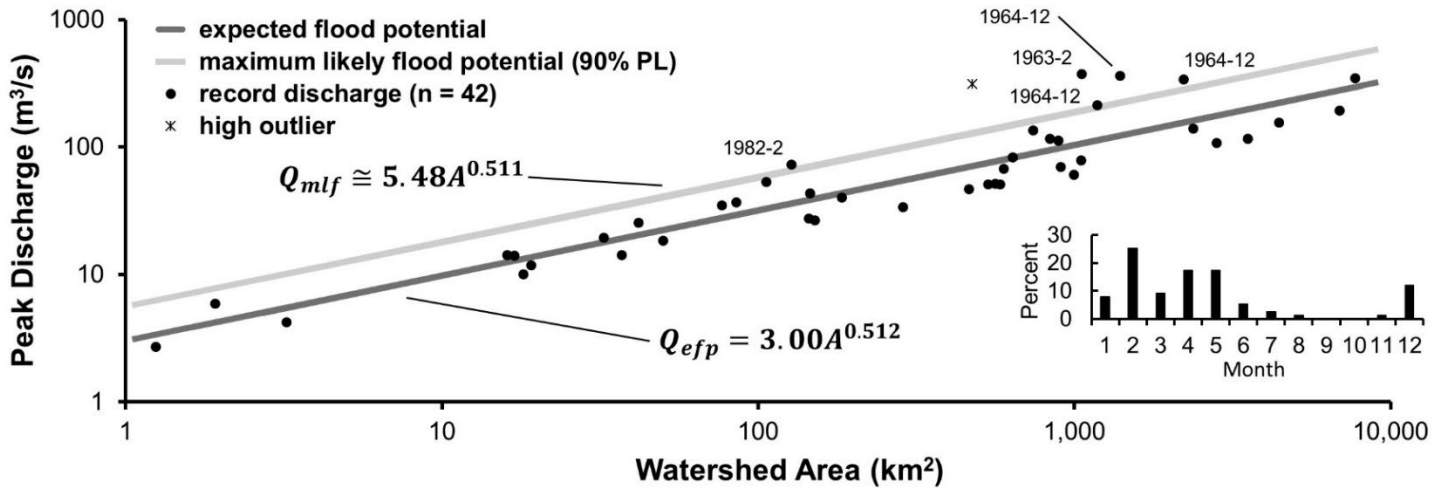


**Zone 30: Columbia Plateau** ( $P_f = 2.8$ )



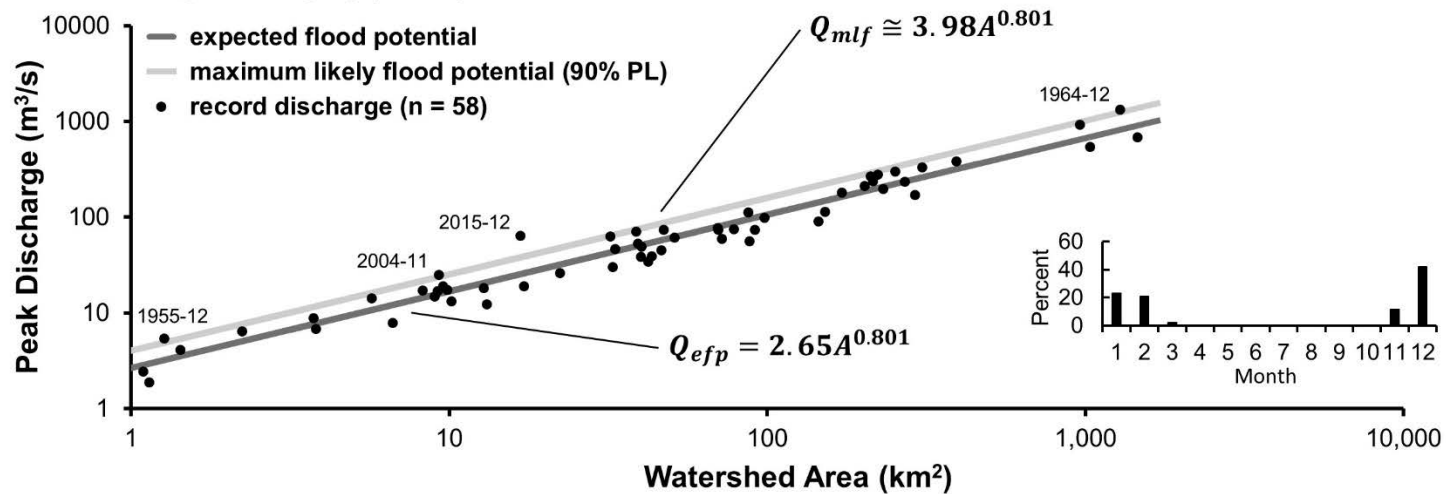
**Zone 30S: Columbia Plateau, South ( $P_f = 2.3$ )**

$R^2 = 0.86$



**Zone 31: Puget Trough ( $P_f = 8.9$ )**

$R^2 = 0.96$

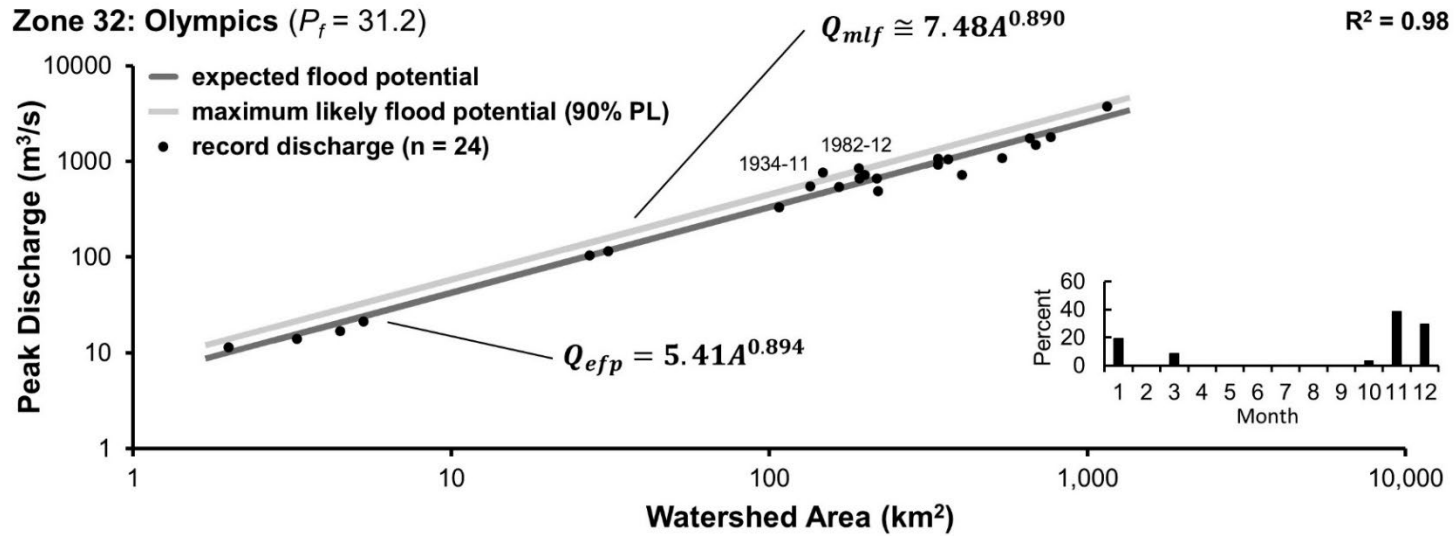


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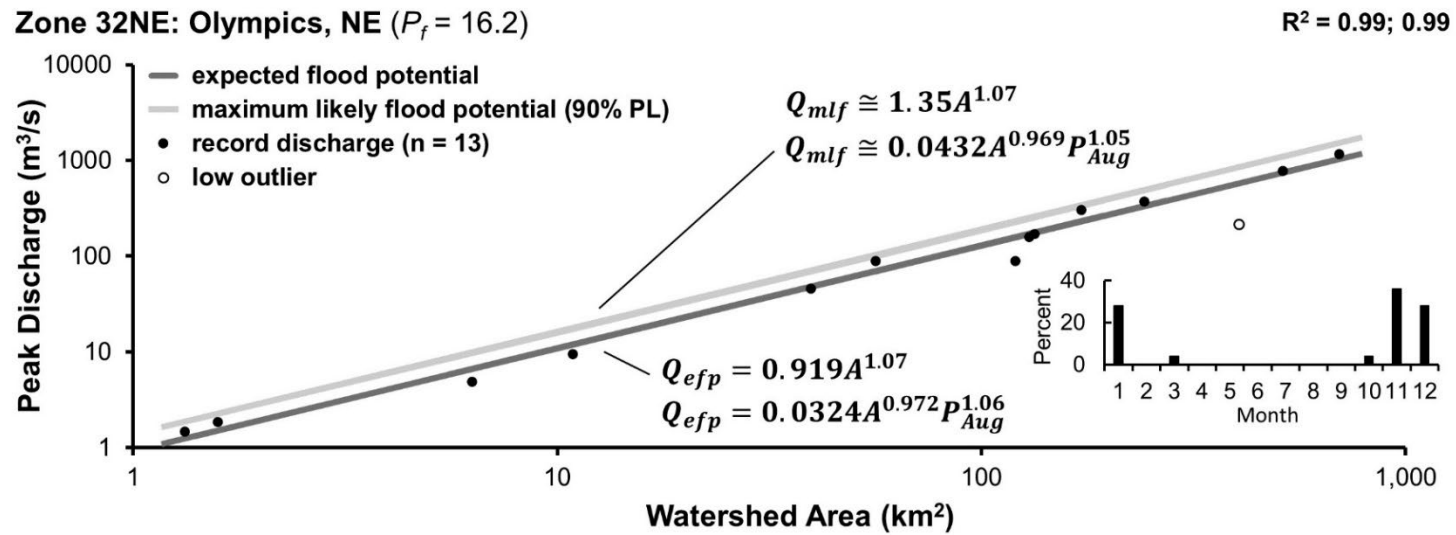
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**Zone 32: Olympics ( $P_f = 31.2$ )**

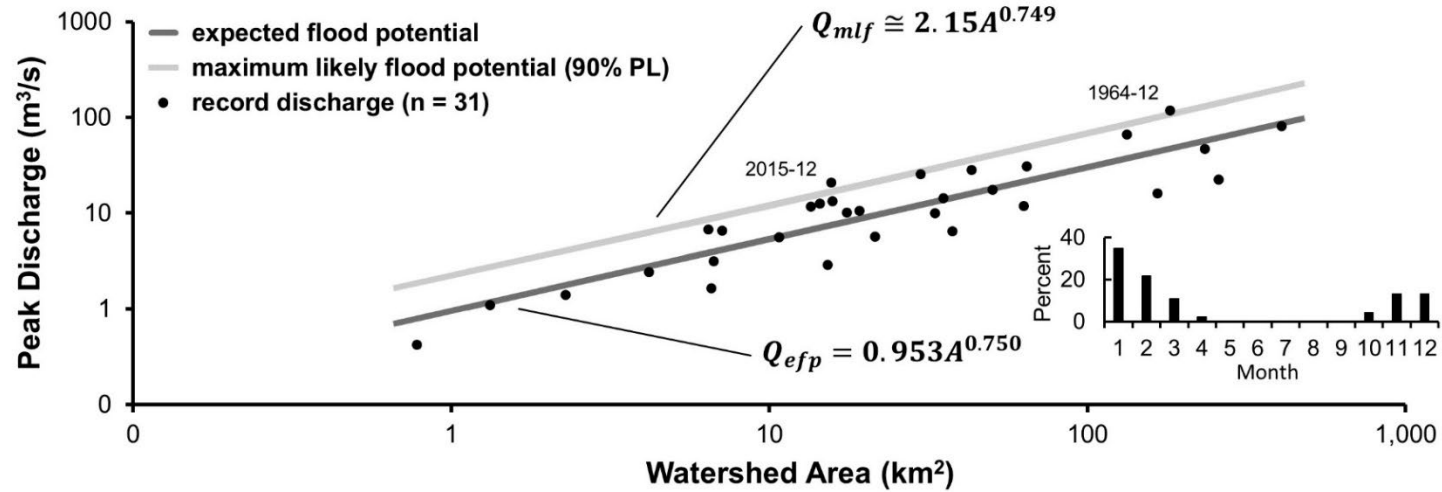


**Zone 32NE: Olympics, NE ( $P_f = 16.2$ )**



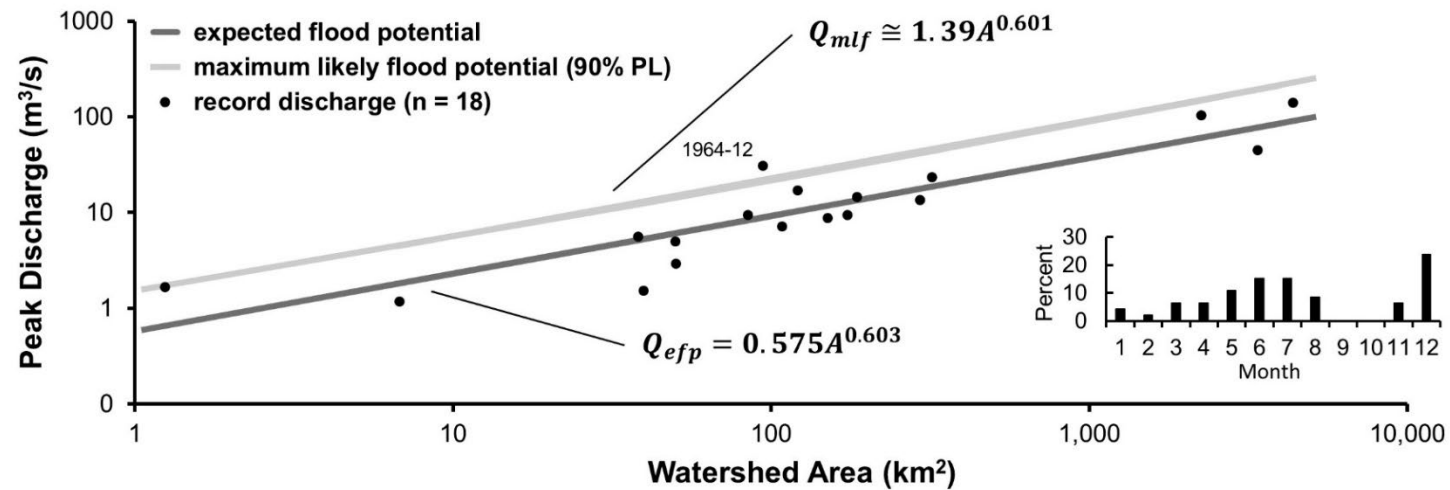
**Zone 33: Puget Sound ( $P_f = 2.4$ )**

$R^2 = 0.78$

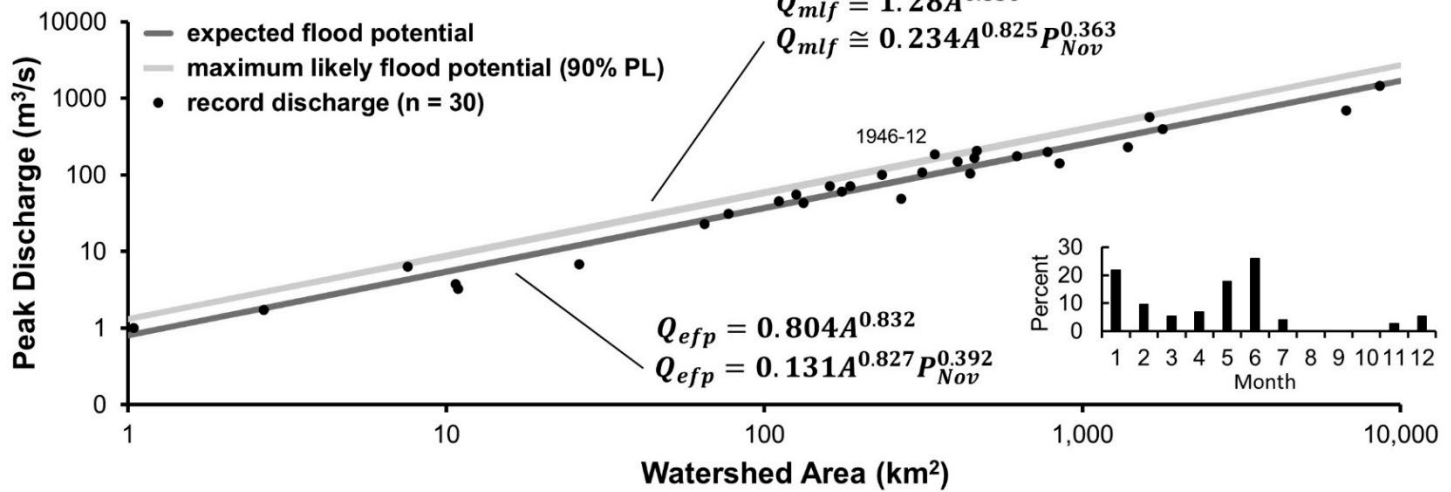


**Zone 34: Volcanic Leeward ( $P_f = 0.68$ )**

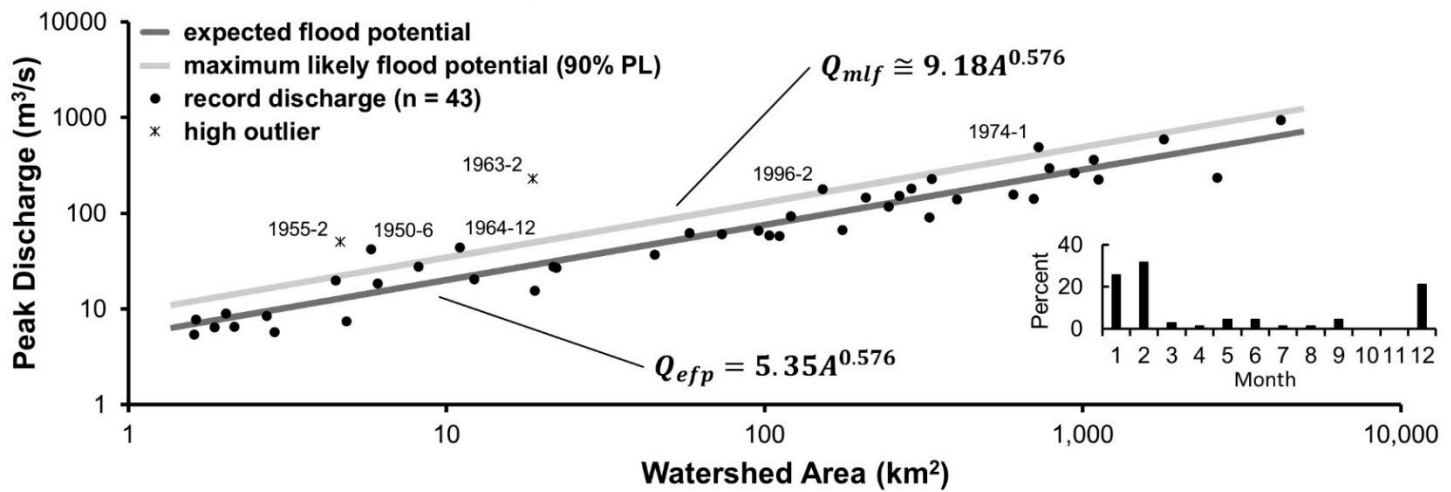
$R^2 = 0.78$



**Zone 35: Blue Mountains ( $P_f = 3.2$ )**

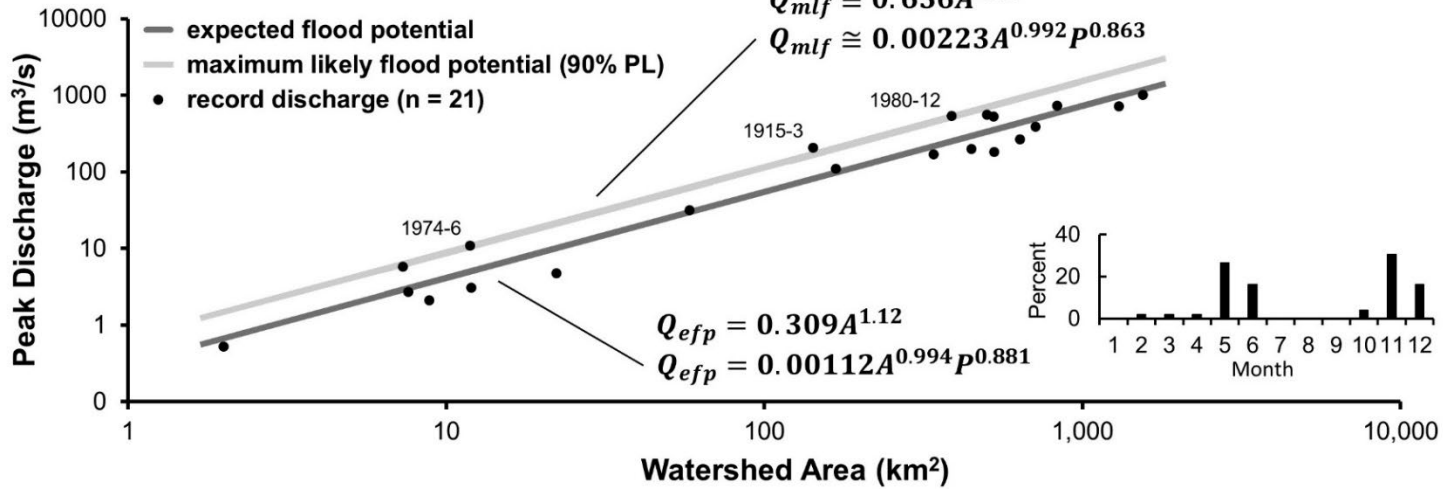


**Zone 36: Columbia Plateau, North ( $P_f = 5.5$ )**



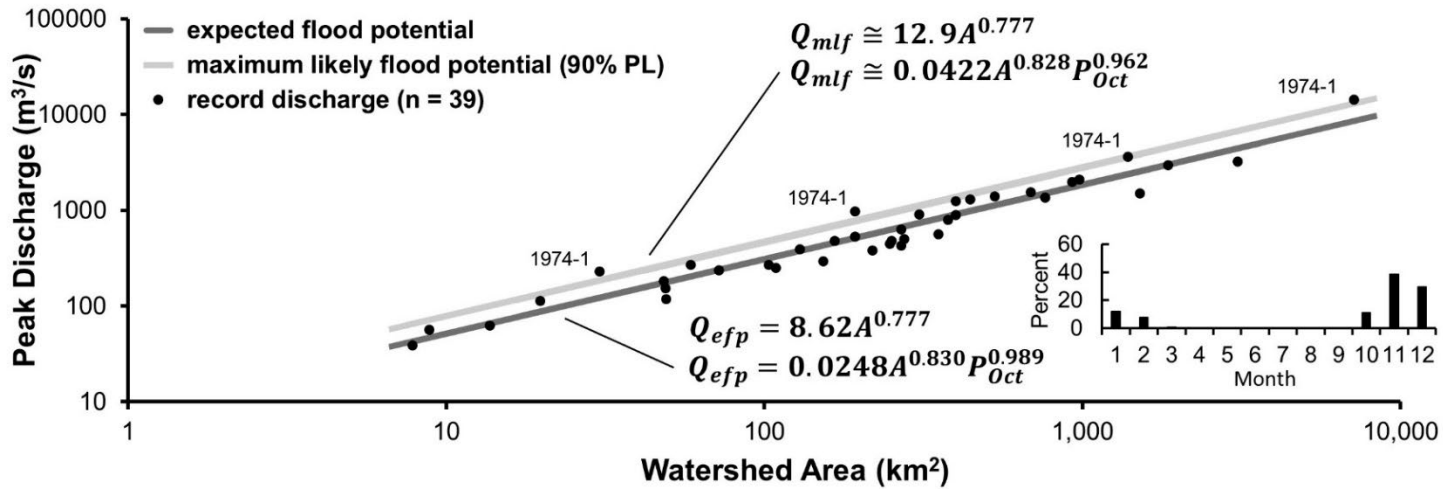
**Zone 37: Cascades, Northeast ( $P_f = 7.6$ )**

$R^2 = 0.95; 0.97$



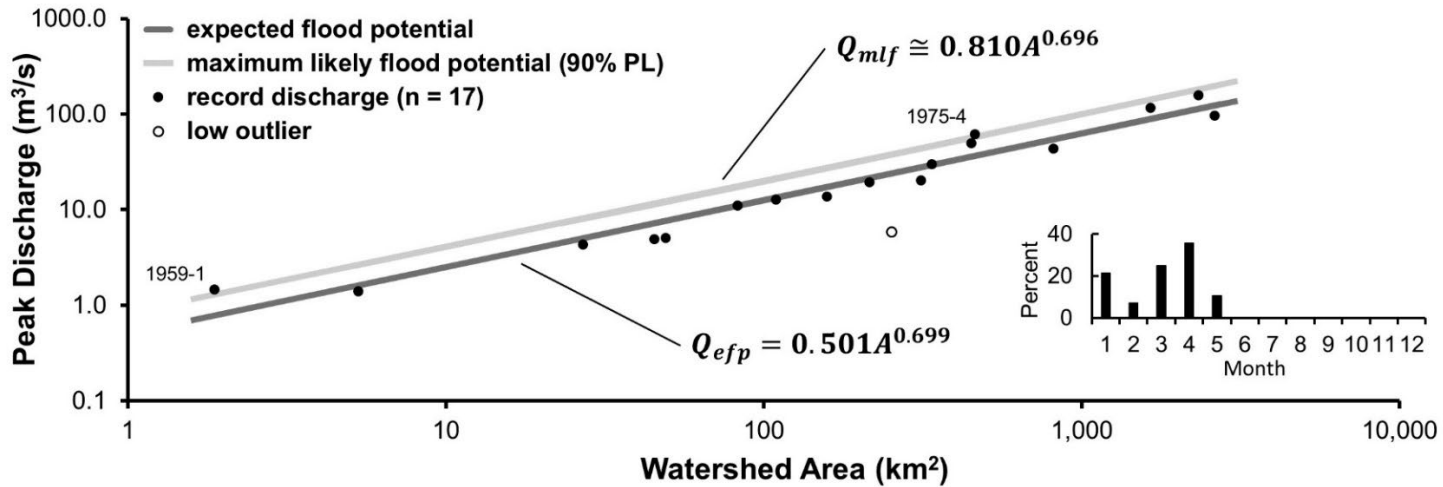
**Zone 38: Cascades, Northwest ( $P_f = 25.5$ )**

$R^2 = 0.94; 0.95$



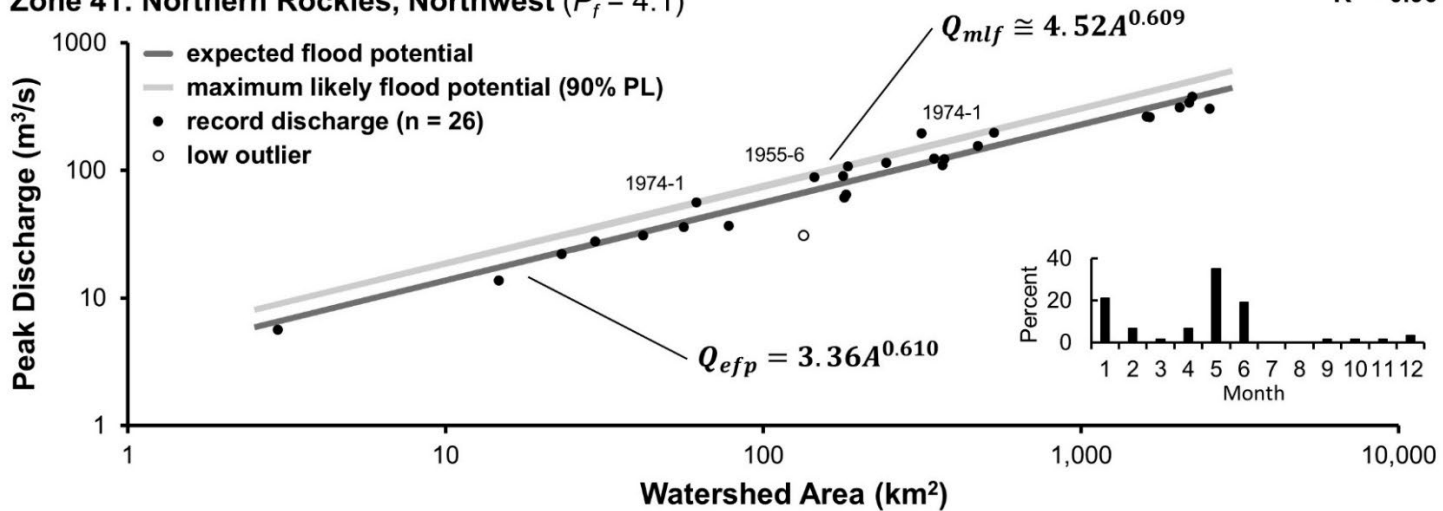
**Zone 40: Northern Rockies, Northwest Transition ( $P_f = 0.97$ )**

$R^2 = 0.95$



**Zone 41: Northern Rockies, Northwest ( $P_f = 4.1$ )**

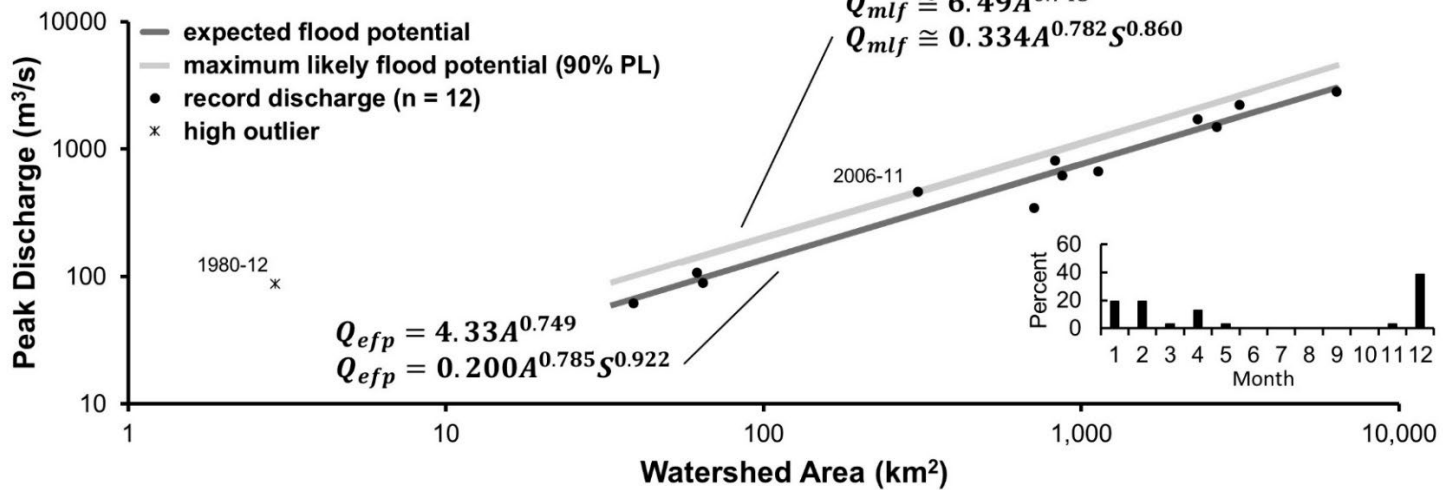
$R^2 = 0.96$



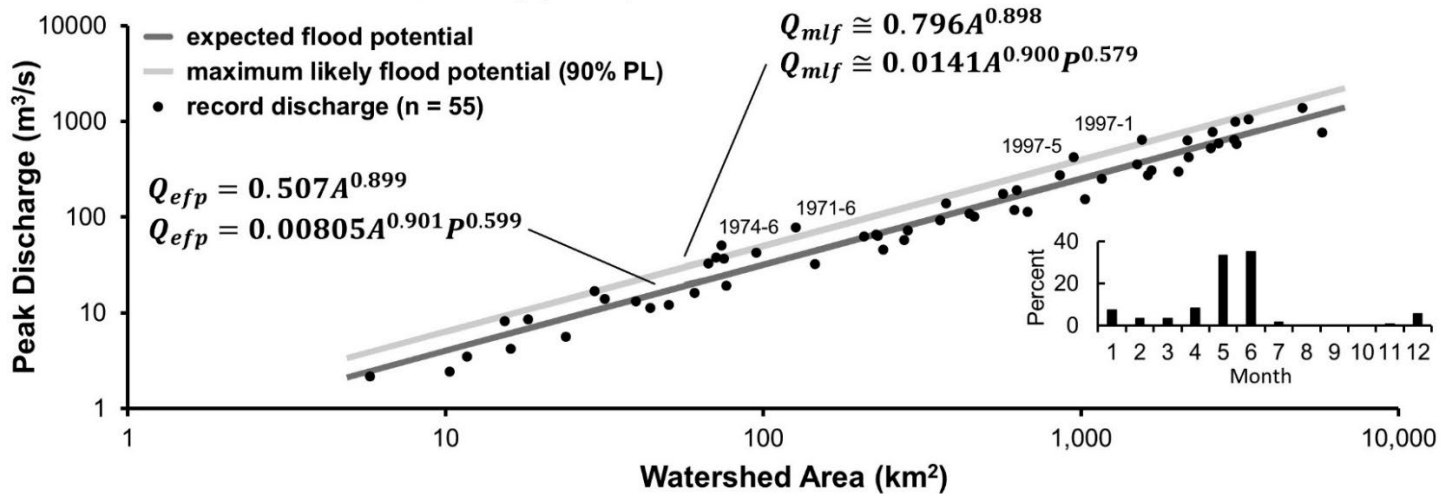
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**Zone 42N: Northern Rockies, North ( $P_f = 10.9$ )**



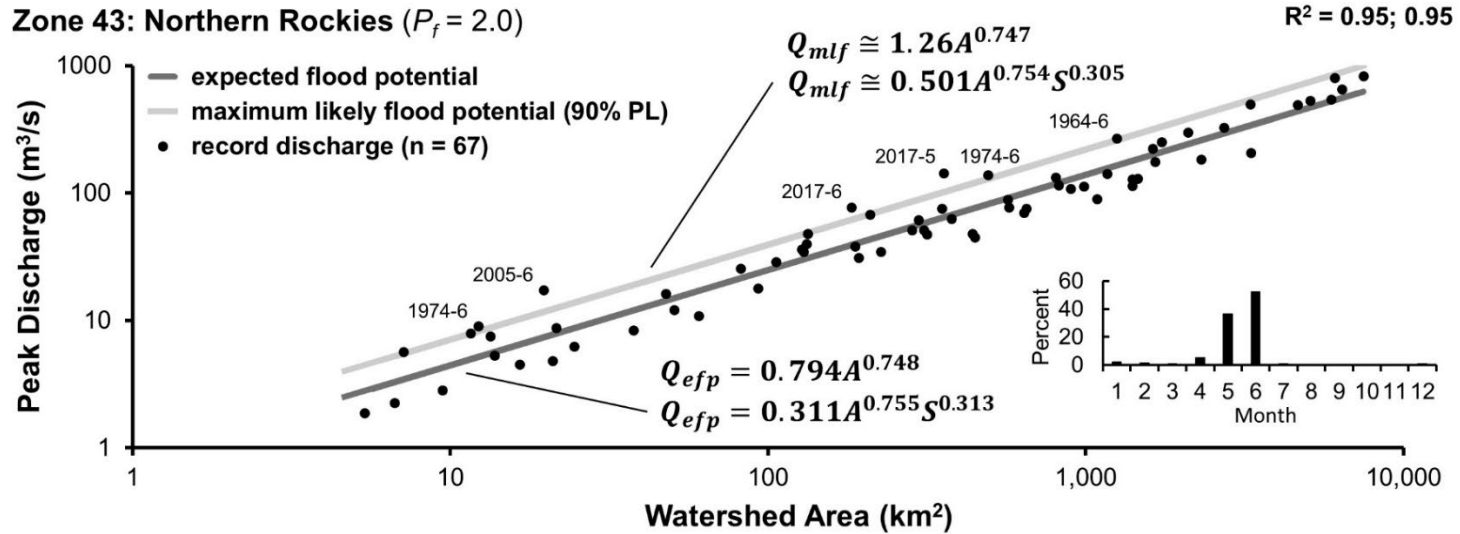
**Zone 42W: Northern Rockies, West ( $P_f = 3.0$ )**



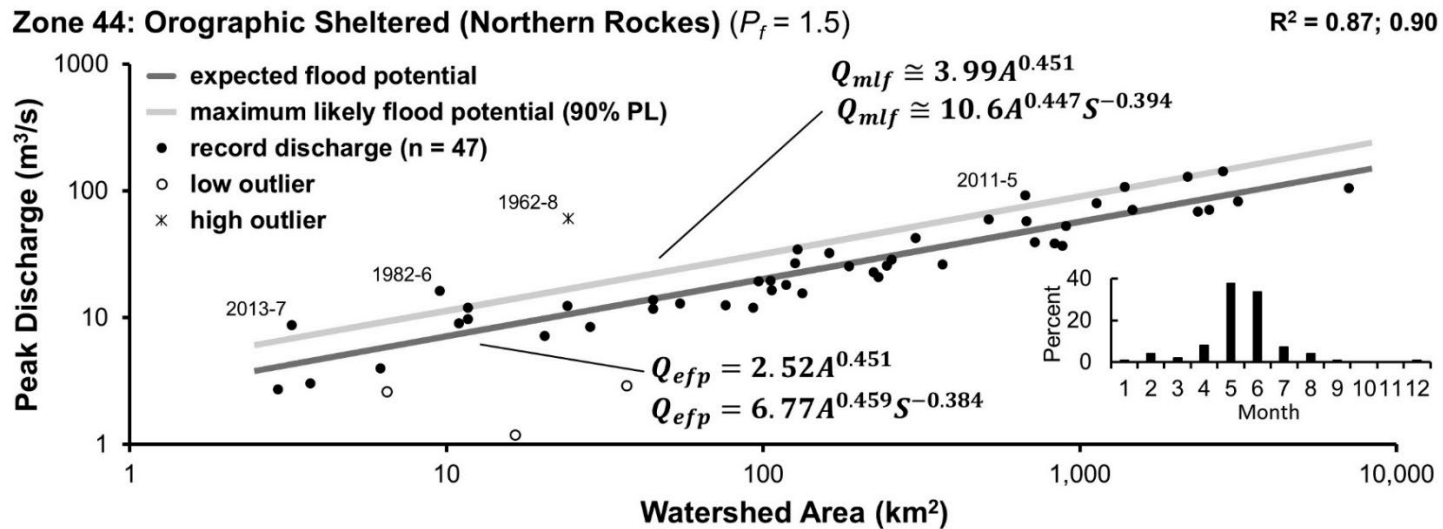
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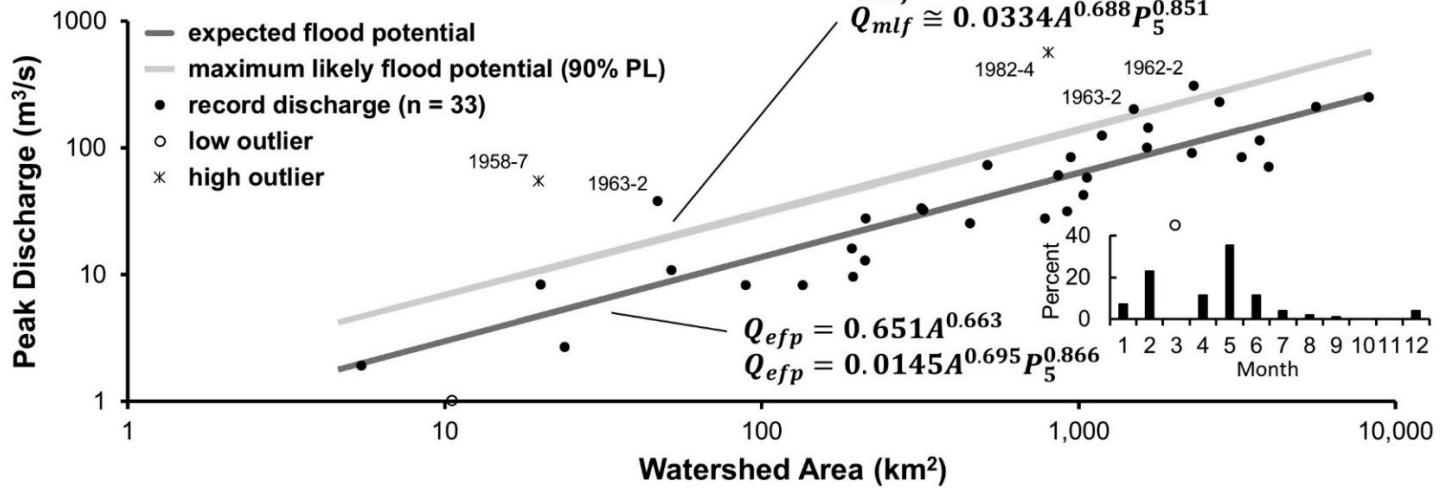
**Zone 43: Northern Rockies ( $P_f = 2.0$ )**



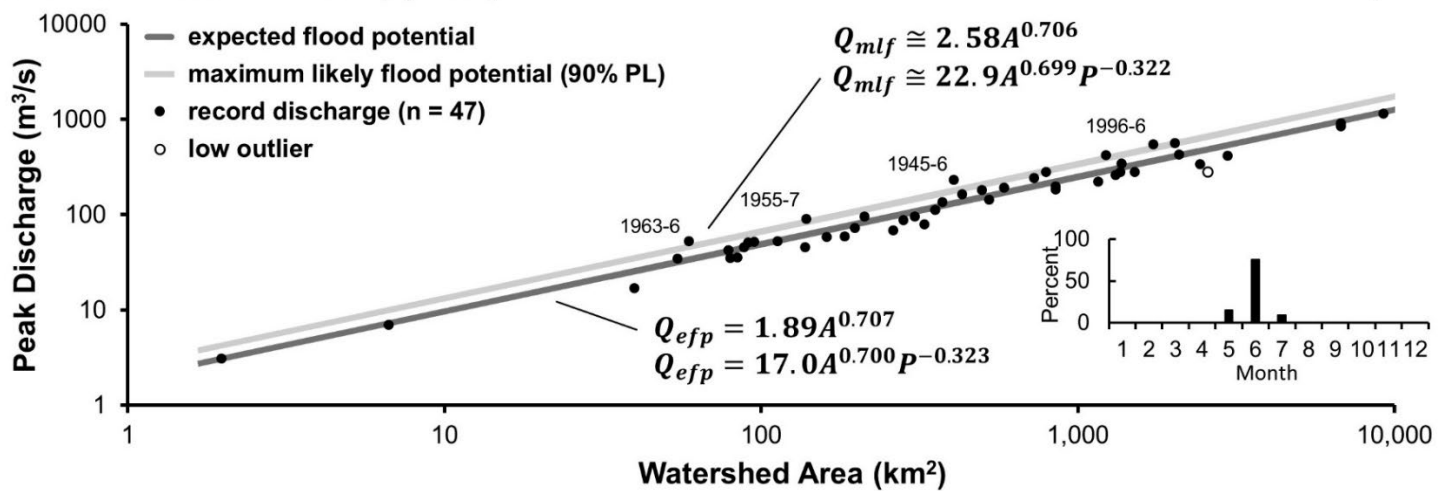
**Zone 44: Orographic Sheltered (Northern Rockies) ( $P_f = 1.5$ )**



**Zone 45: Snake River Plain Transition ( $P_f = 1.04$ )**



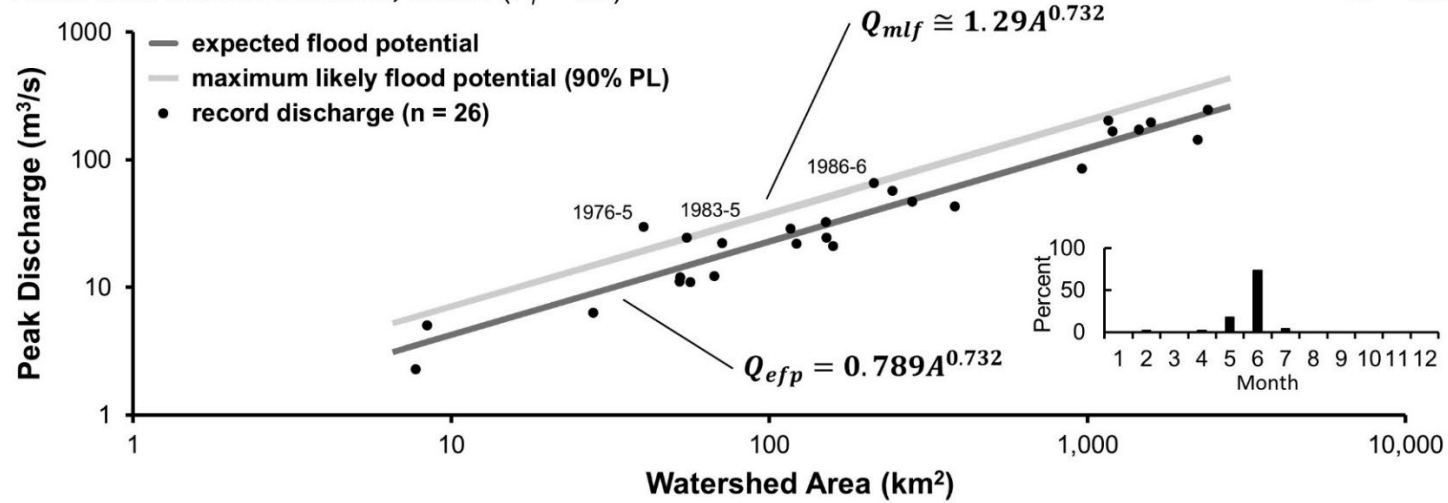
**Zone 46: Central Rockies ( $P_f = 3.8$ )**





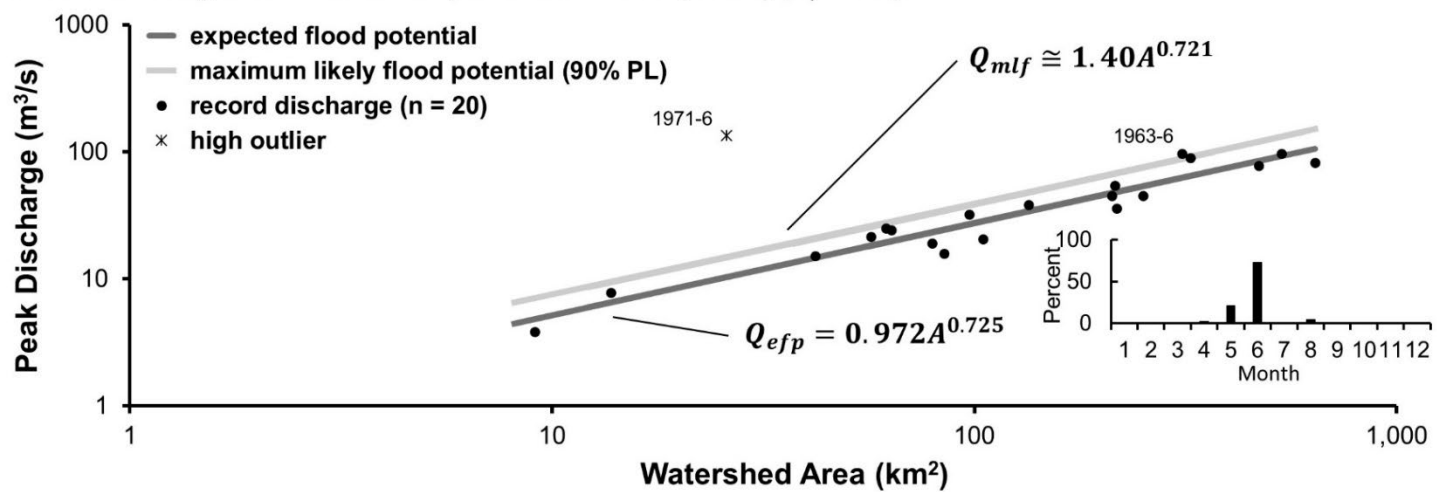
**Zone 46S: Central Rockies, South ( $P_f = 1.8$ )**

$R^2 = 0.92$



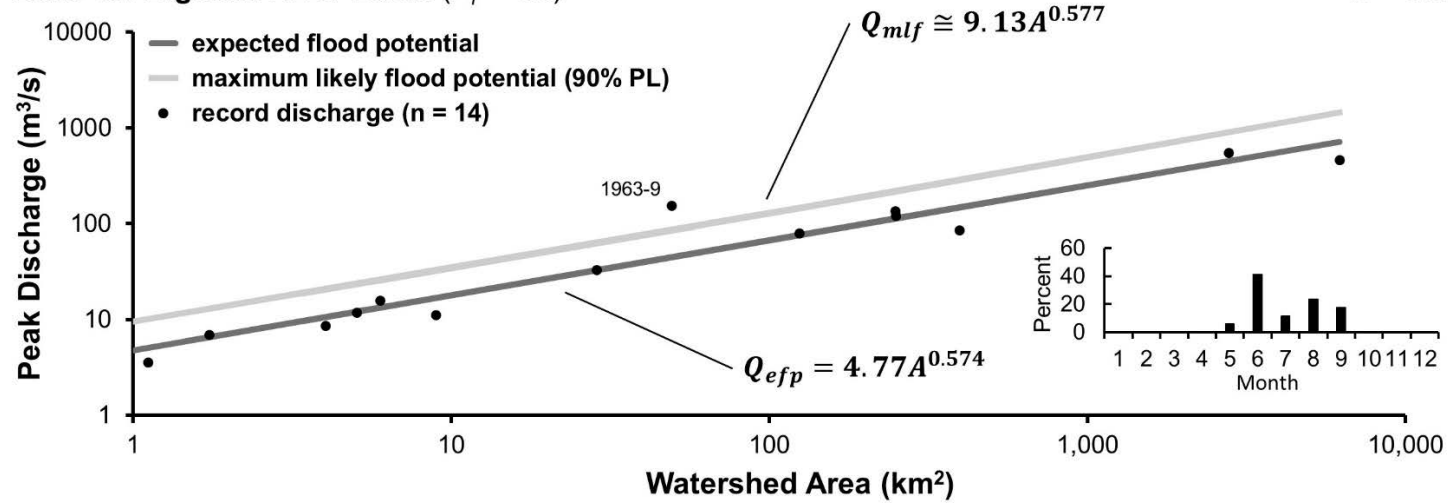
**Zone 46E: Bighorn Mountains (Central Rockies, East) ( $P_f = 2.2$ )**

$R^2 = 0.92$



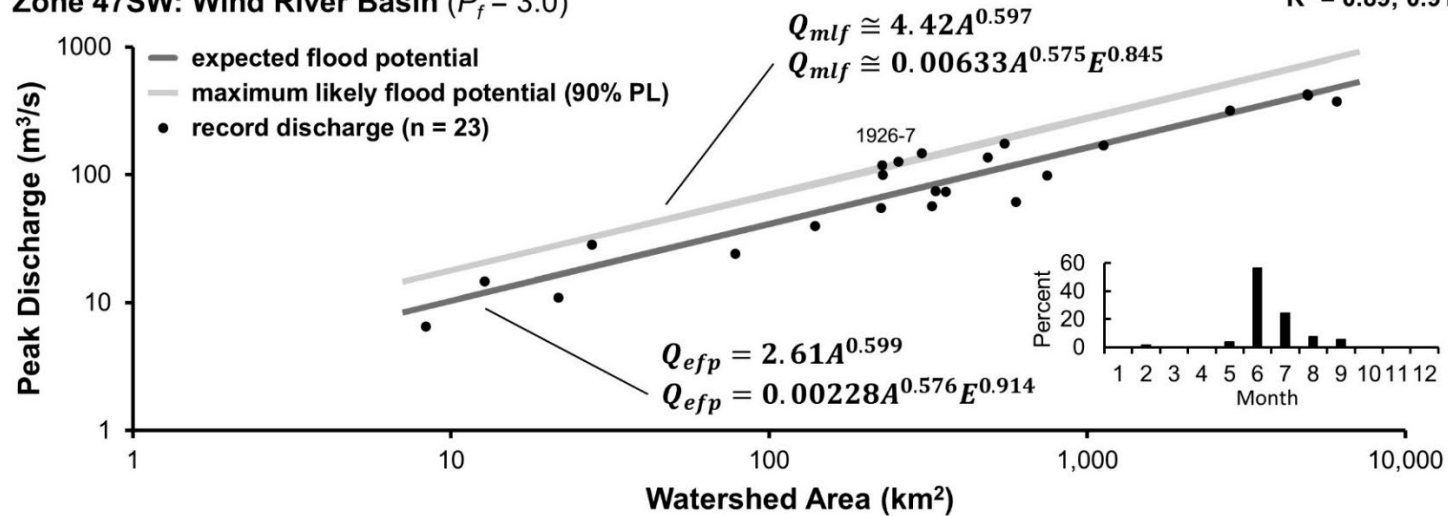
**Zone 47: Bighorn River Basin ( $P_f = 4.9$ )**

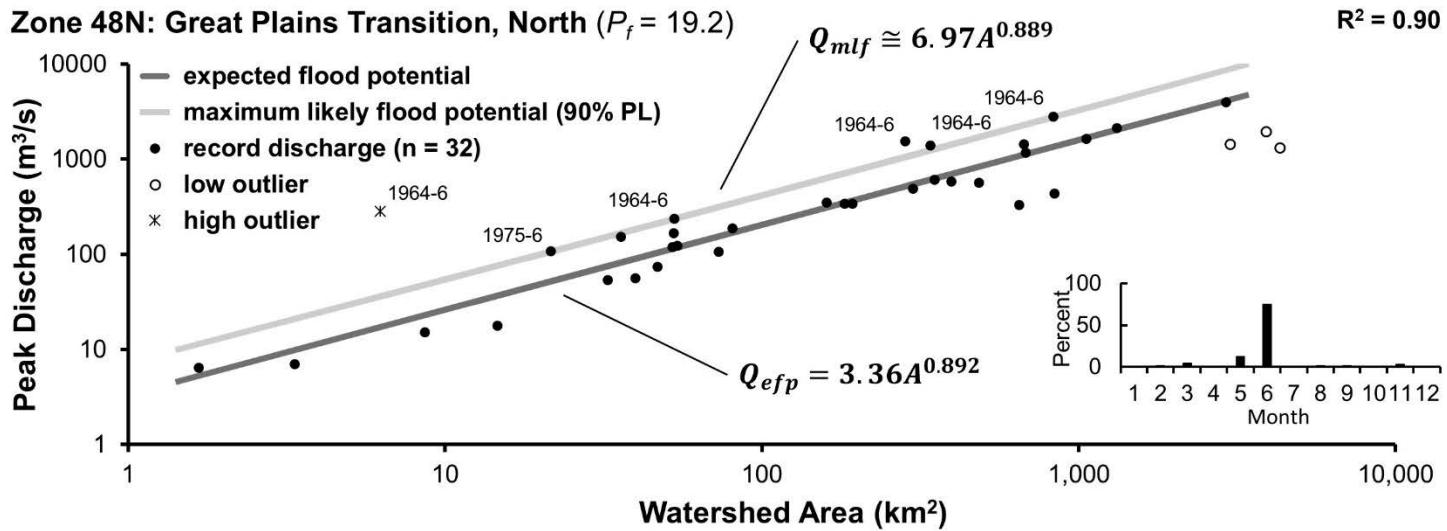
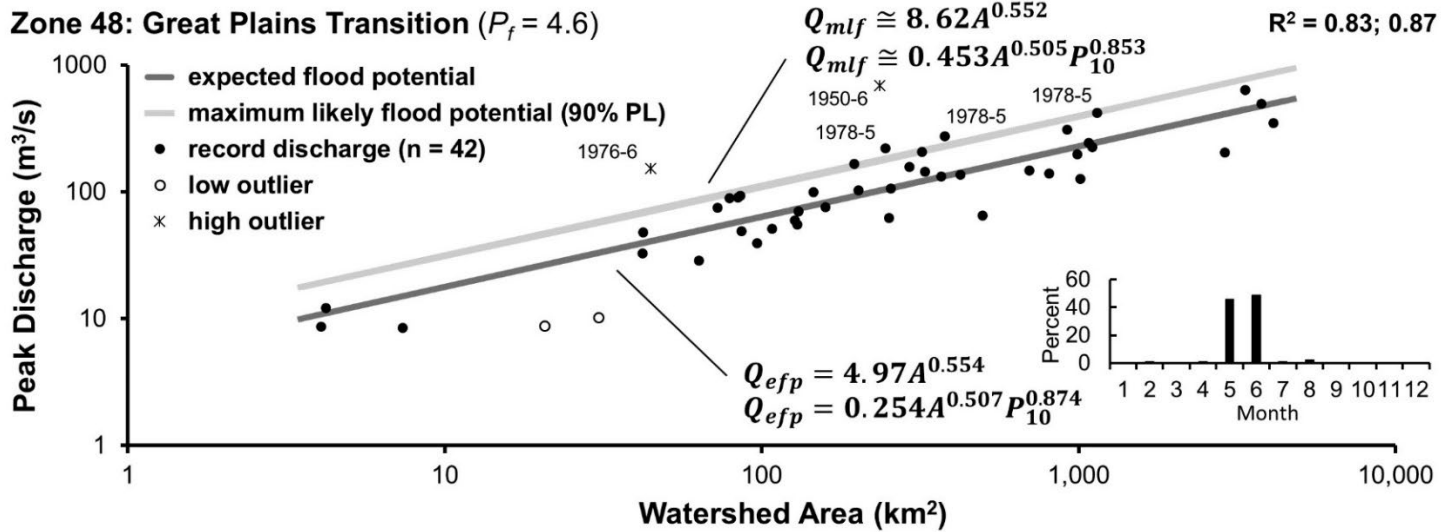
$R^2 = 0.92$



**Zone 47SW: Wind River Basin ( $P_f = 3.0$ )**

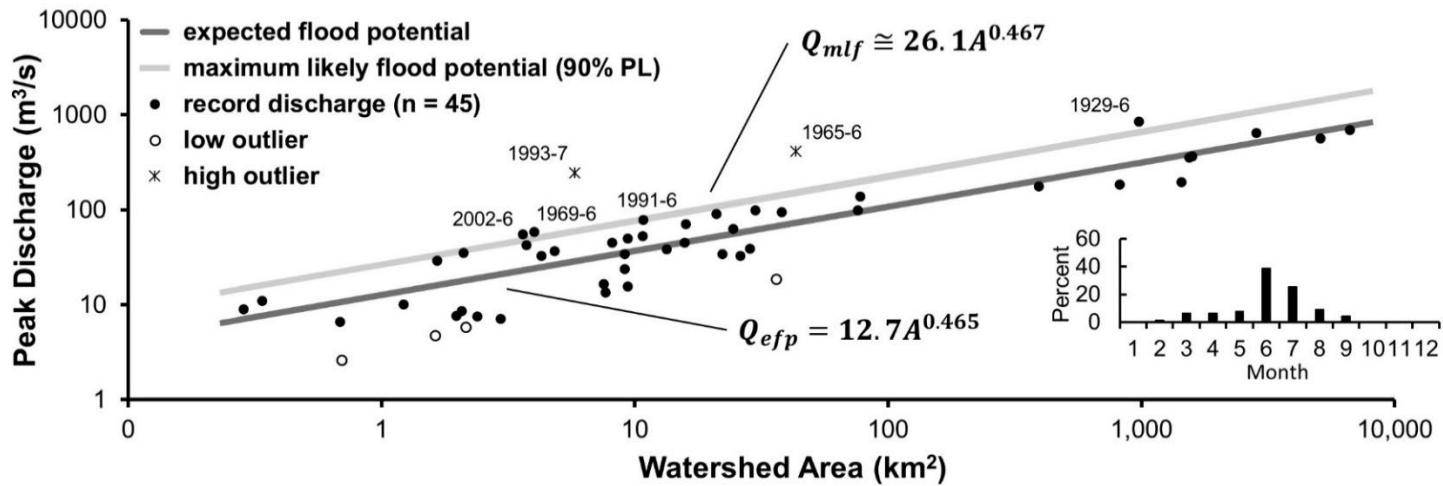
$R^2 = 0.89; 0.91$





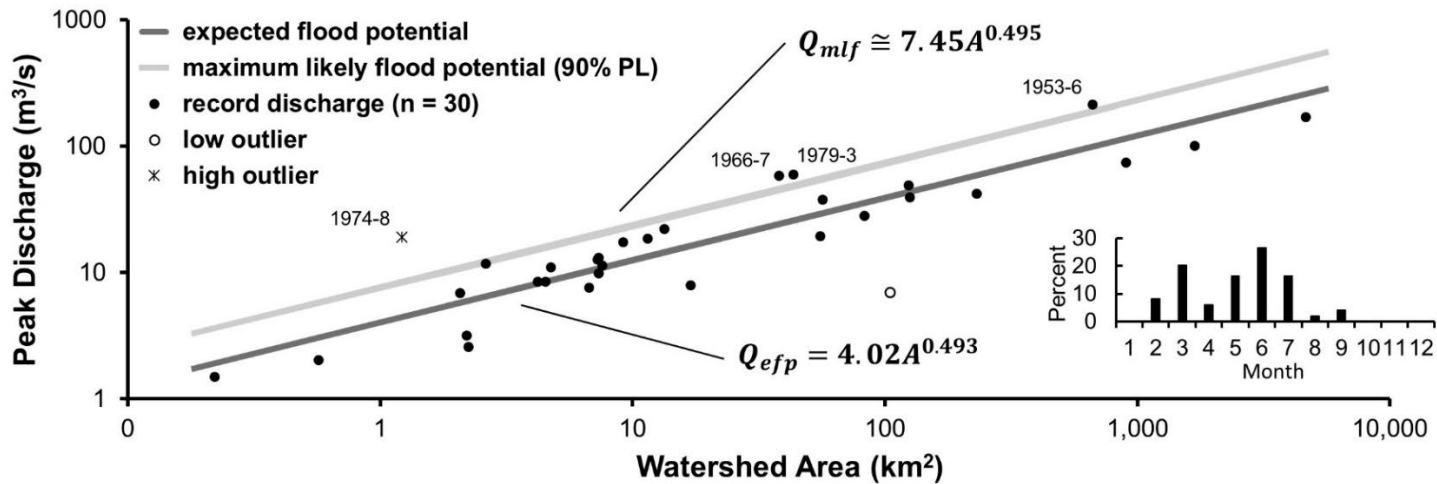
**Zone 49: Missouri Plateau ( $P_f = 7.8$ )**

$R^2 = 0.82$

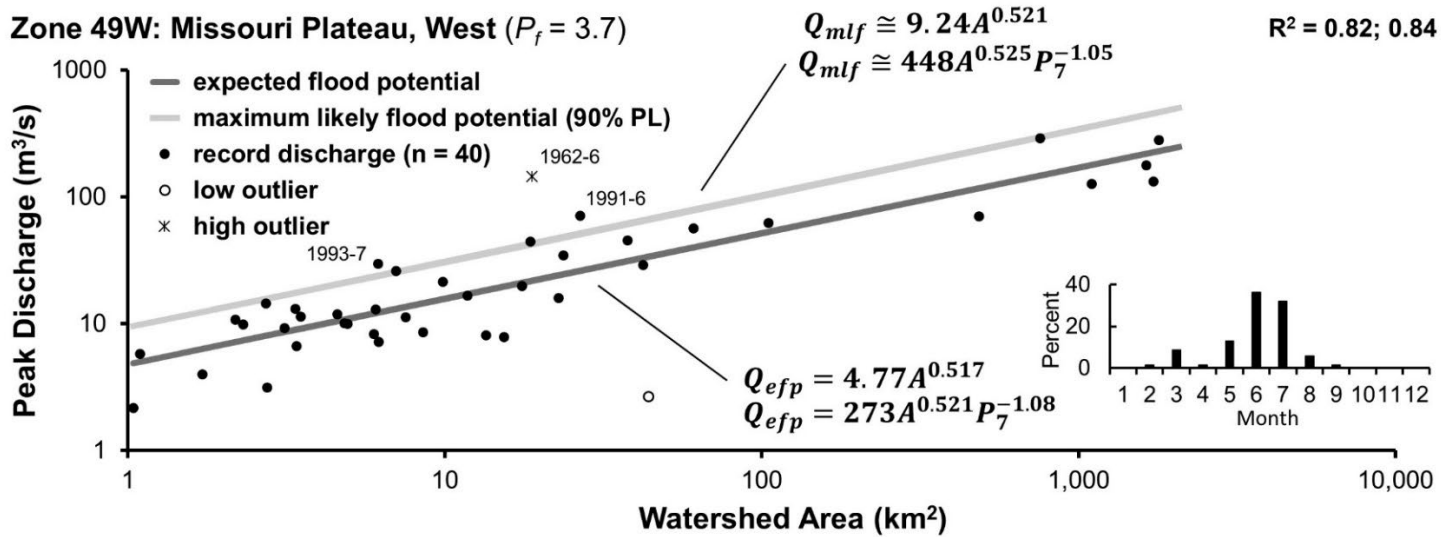


**Zone 49NW: Missouri Plateau, Northwest ( $P_f = 2.8$ )**

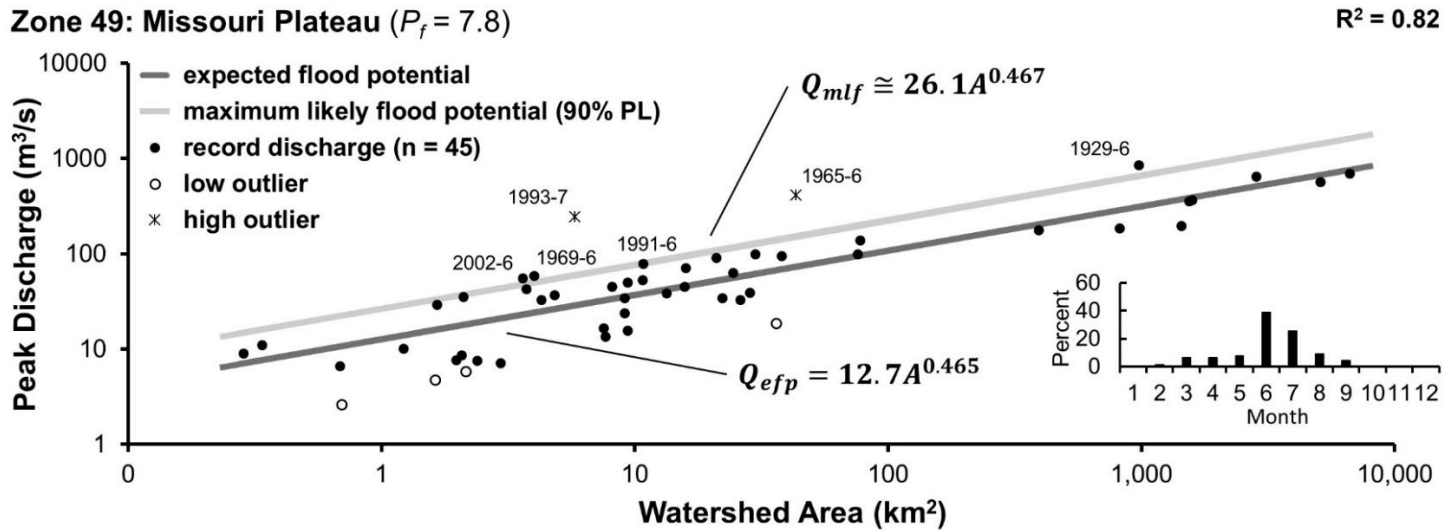
$R^2 = 0.86$



**Zone 49W: Missouri Plateau, West ( $P_f = 3.7$ )**

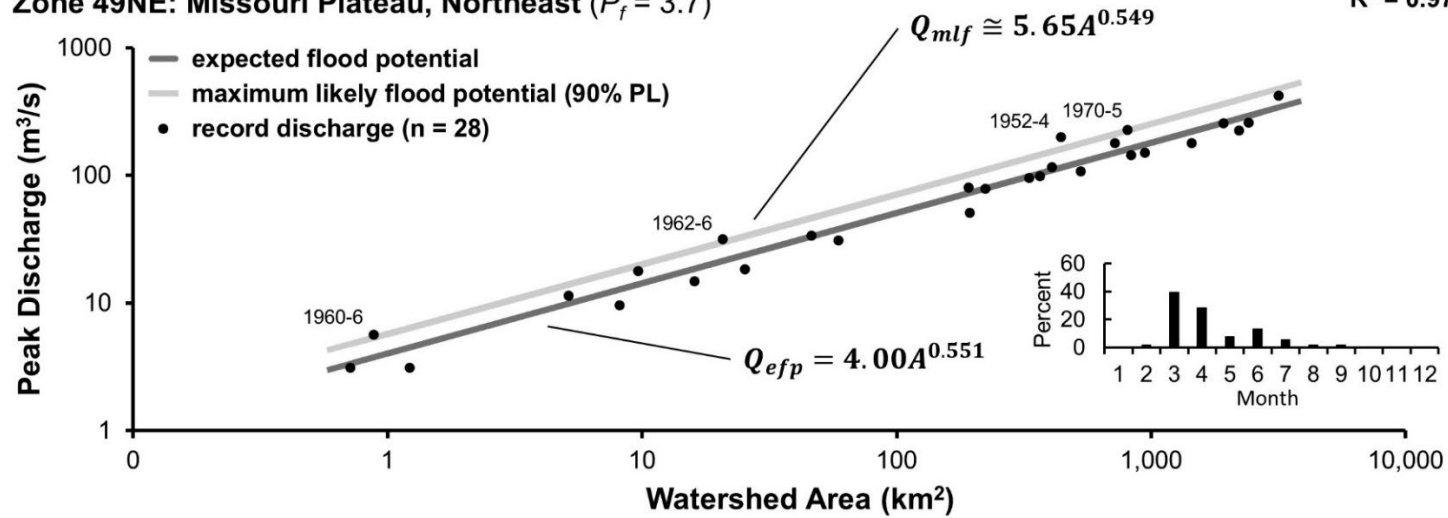


**Zone 49: Missouri Plateau ( $P_f = 7.8$ )**



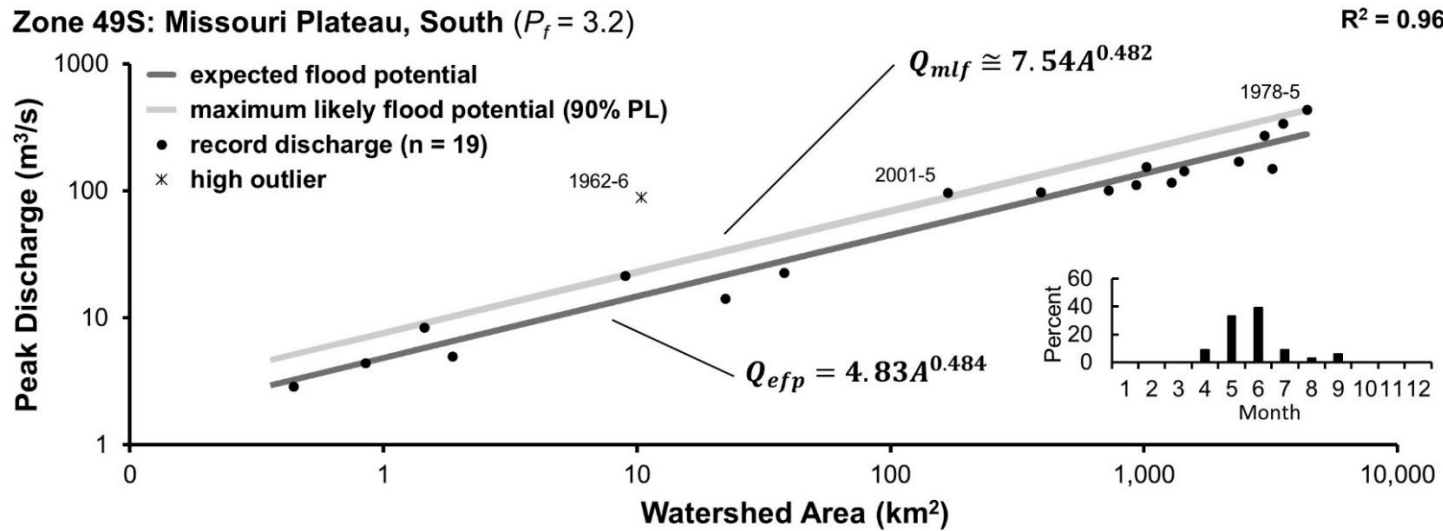
**Zone 49NE: Missouri Plateau, Northeast ( $P_f = 3.7$ )**

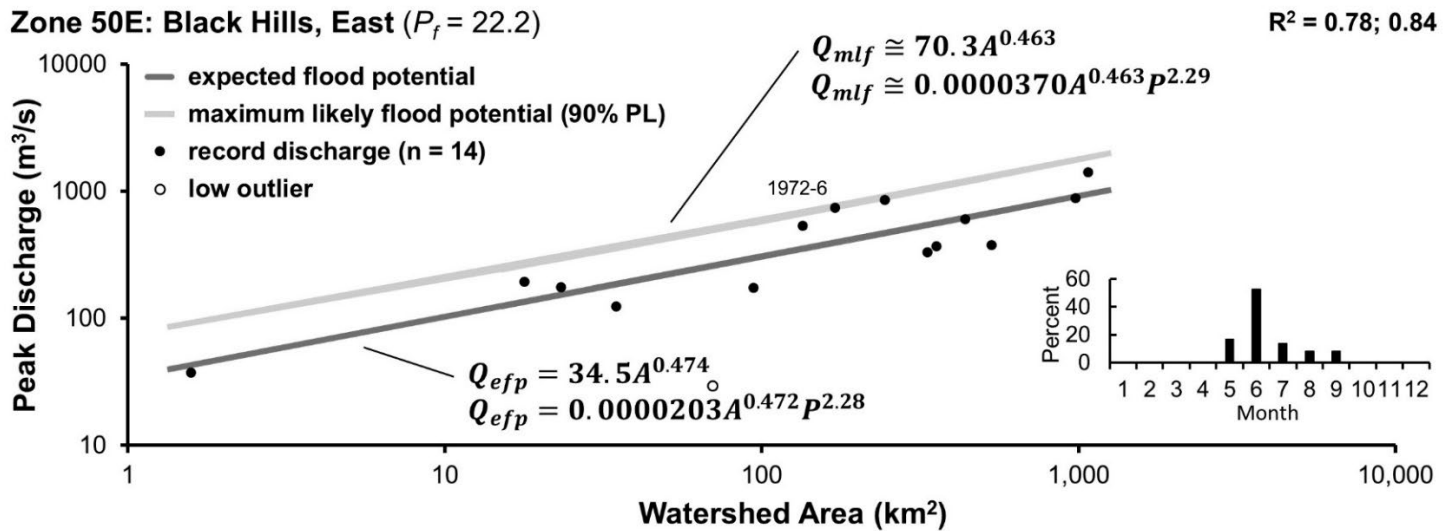
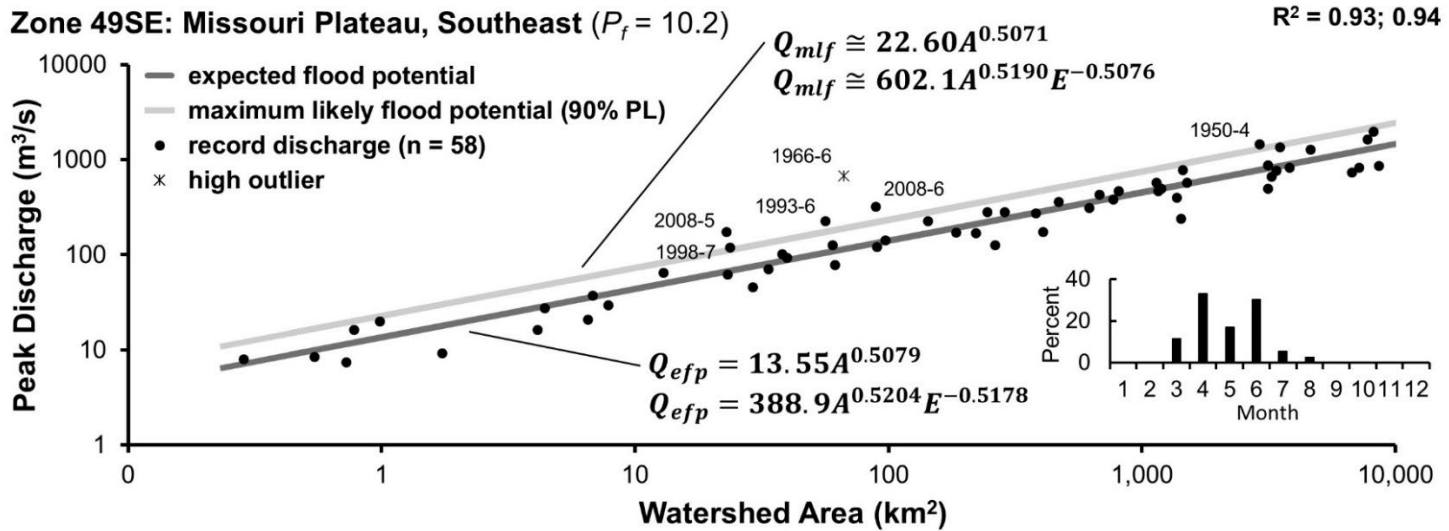
$R^2 = 0.97$



**Zone 49S: Missouri Plateau, South ( $P_f = 3.2$ )**

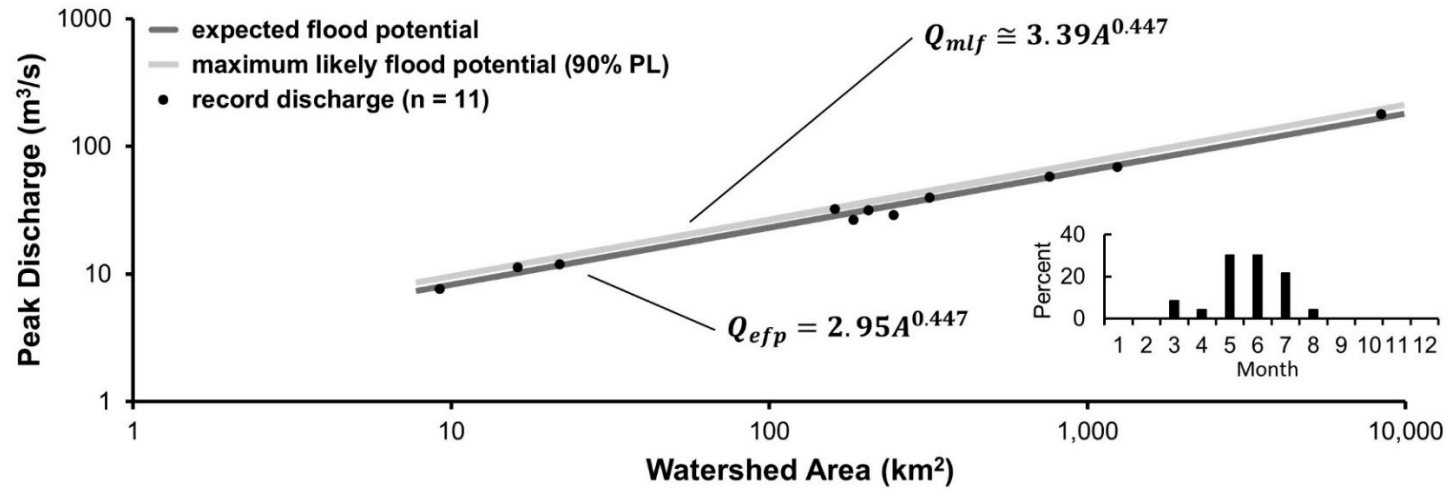
$R^2 = 0.96$





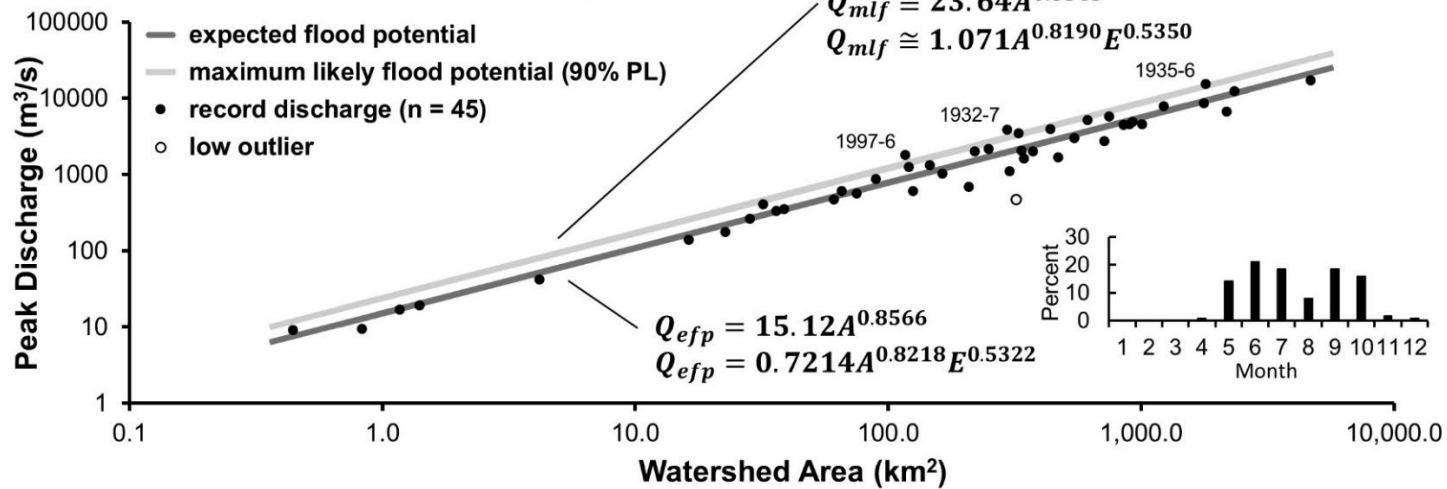
**Zone 50W: Black Hills, West ( $P_f = 1.7$ )**

$R^2 = 0.99$



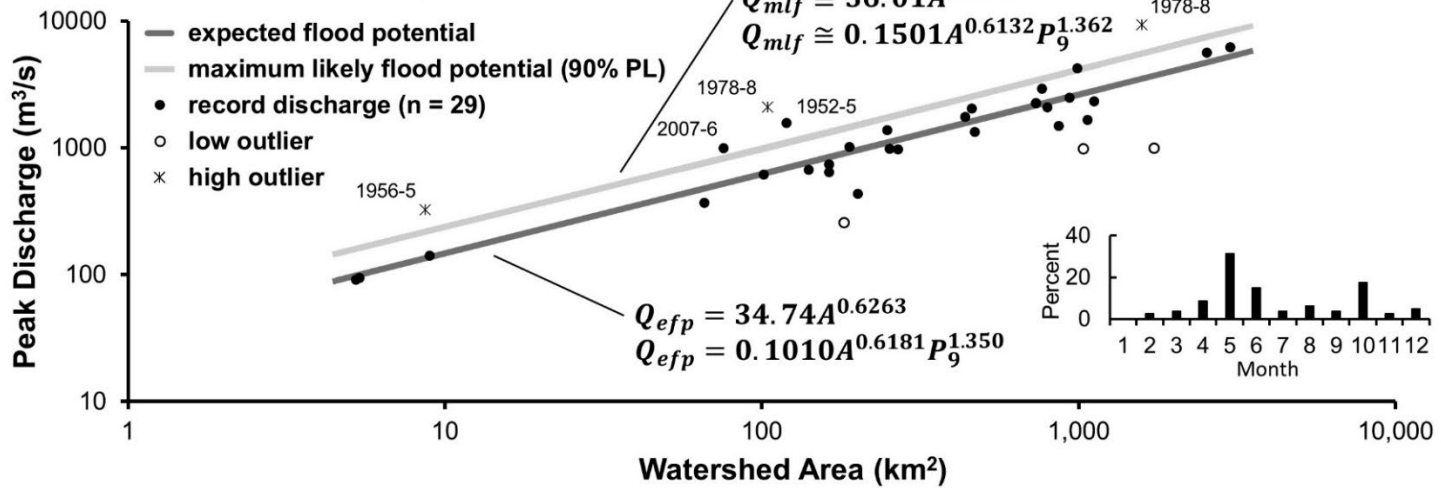
**Zone 51: Edwards Plateau, Southeast ( $P_f = 70.1$ )**

$R^2 = 0.97; 0.98$

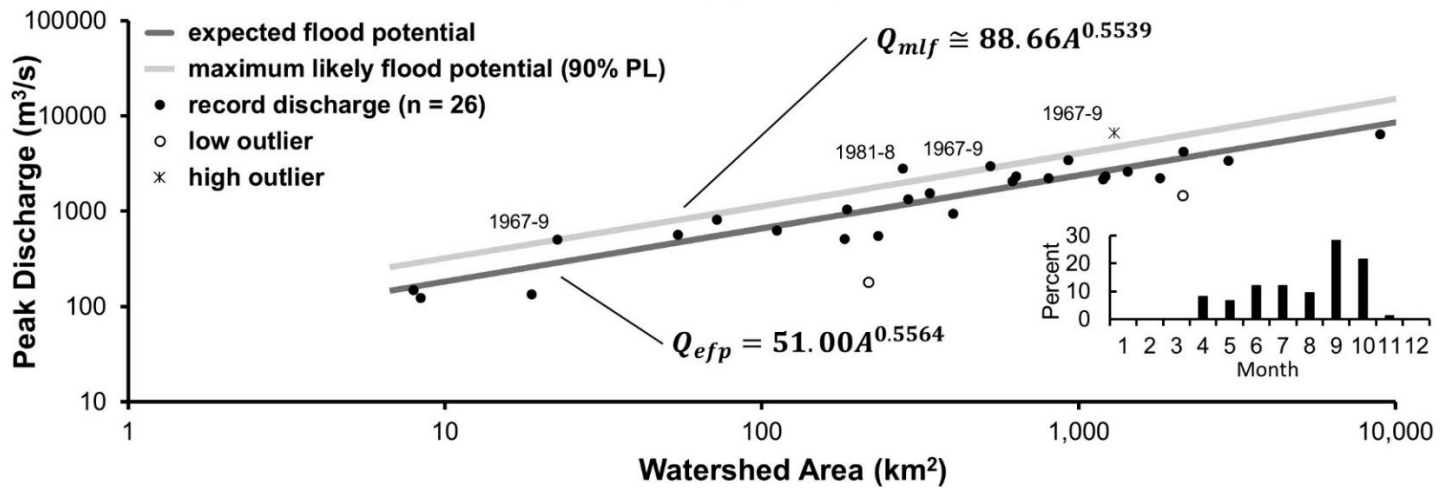




**Zone 52: Plains Transition ( $P_f = 46.2$ )**

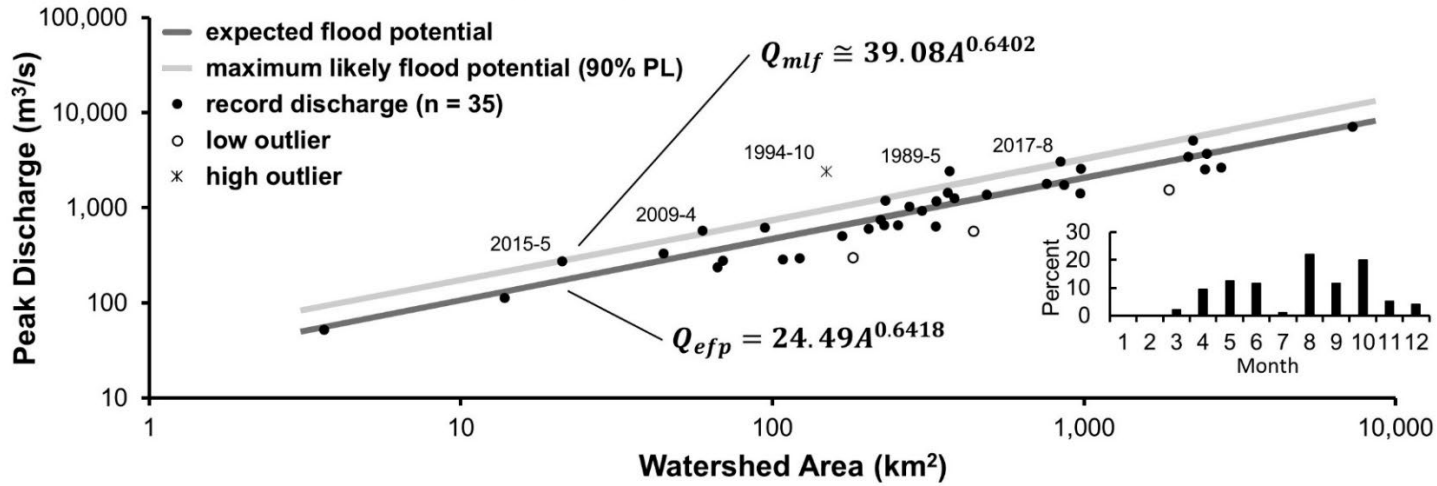


**Zone 53SW: West Gulf Coastal Plain, Southwest ( $P_f = 48.1$ )**



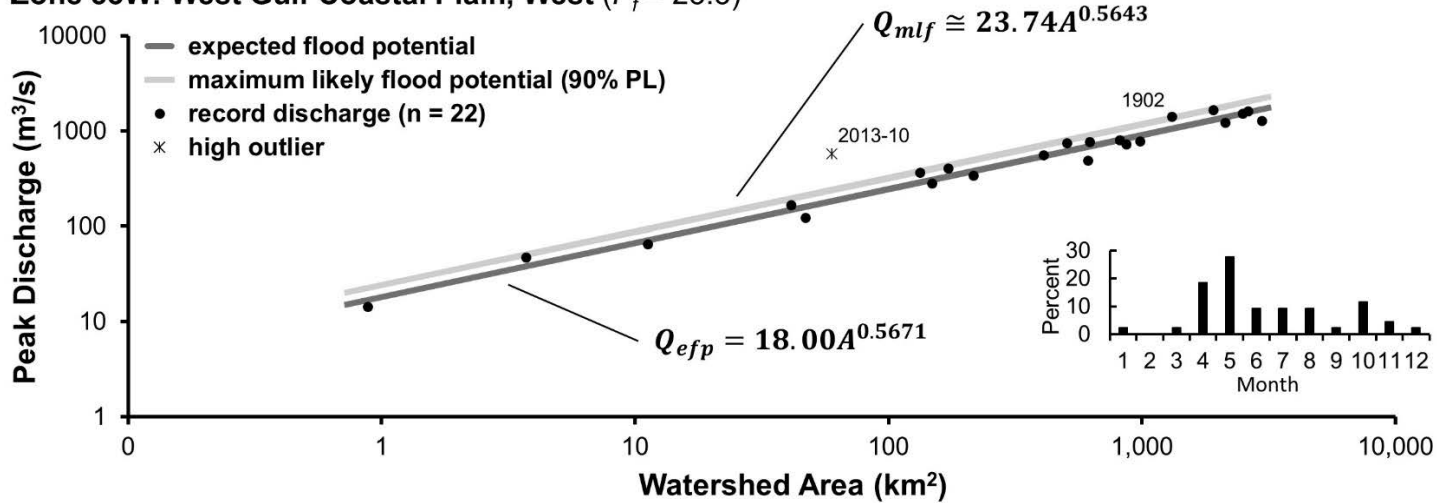
**Zone 53: West Gulf Coastal Plain ( $P_f = 35.2$ )**

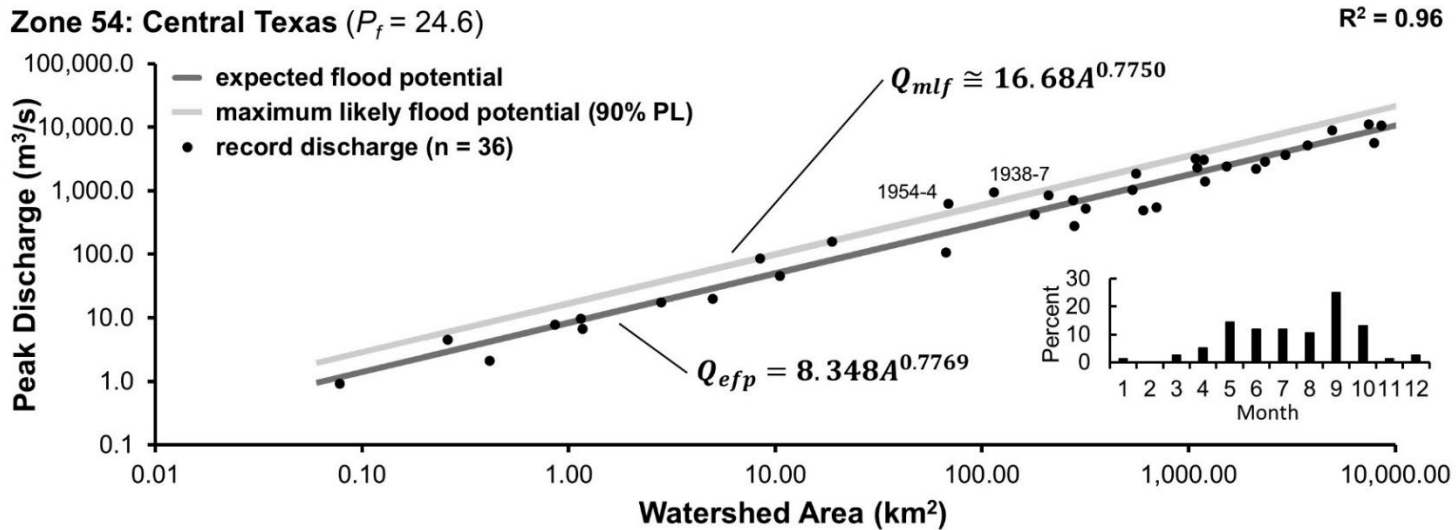
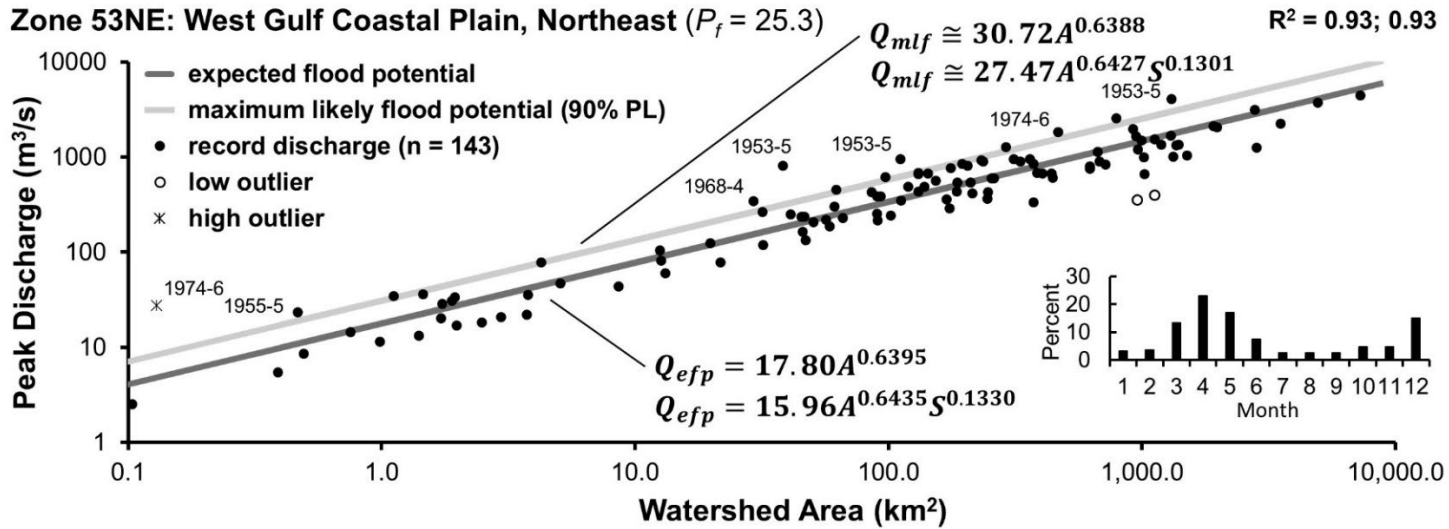
$R^2 = 0.90$



**Zone 53W: West Gulf Coastal Plain, West ( $P_f = 23.3$ )**

$R^2 = 0.98$



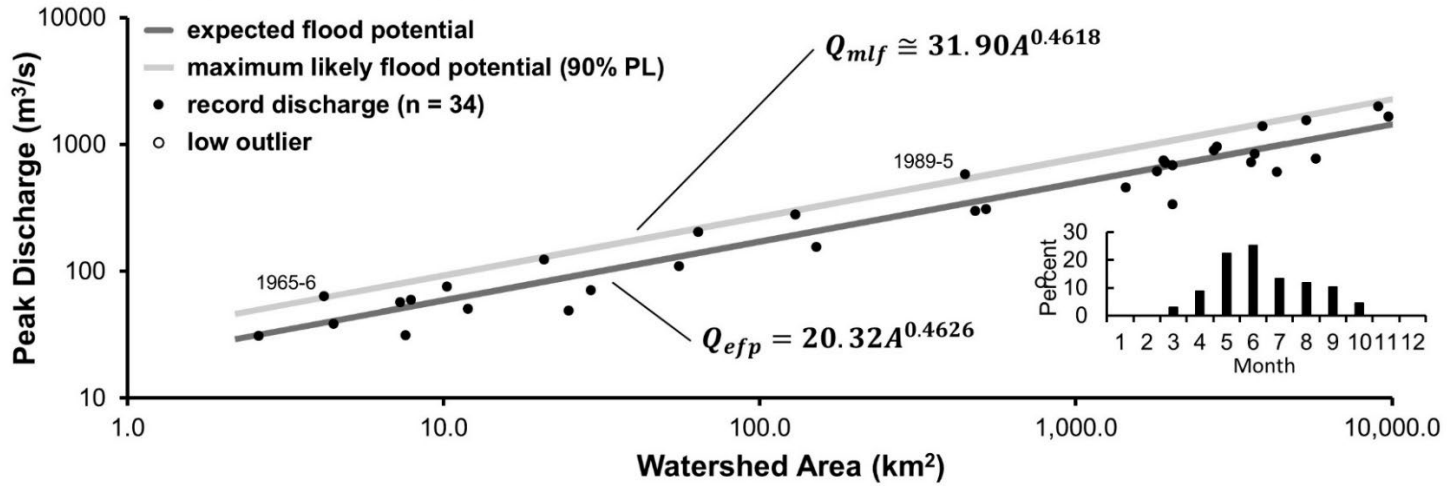


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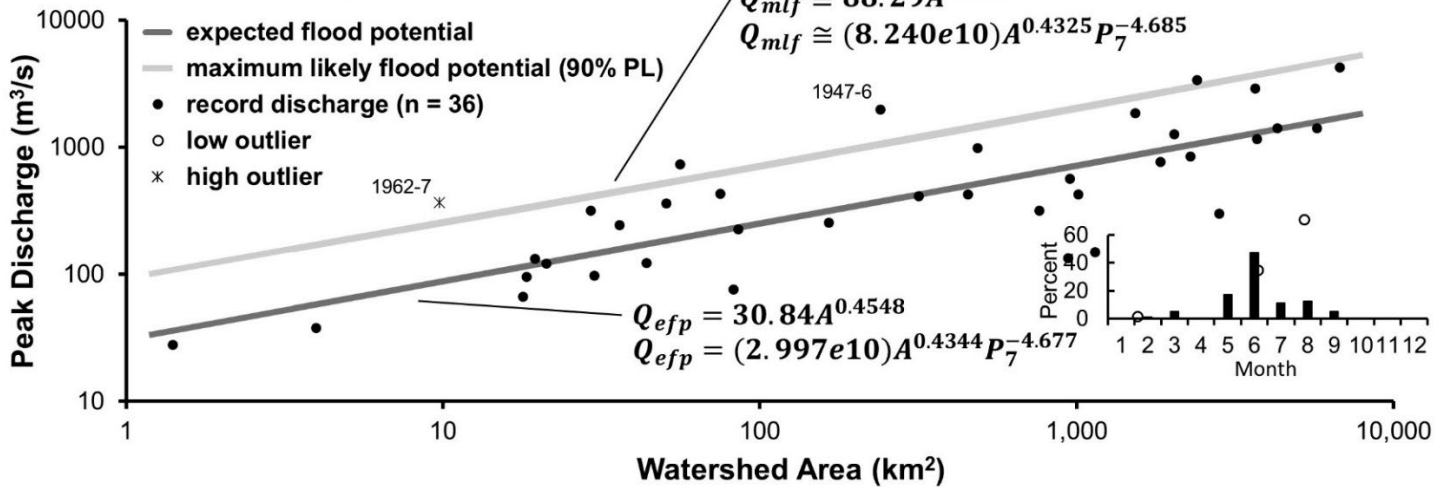
**Zone 55S: High Plains, South ( $P_f = 12.4$ )**

$R^2 = 0.93$

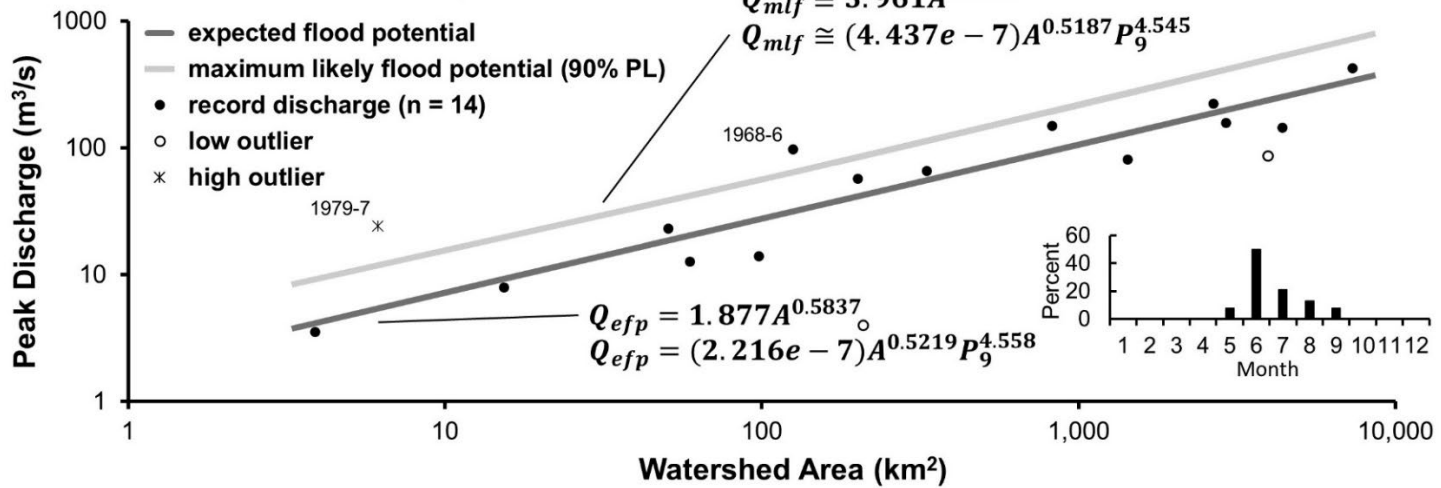


**Zone 55: High Plains ( $P_f = 18.2$ )**

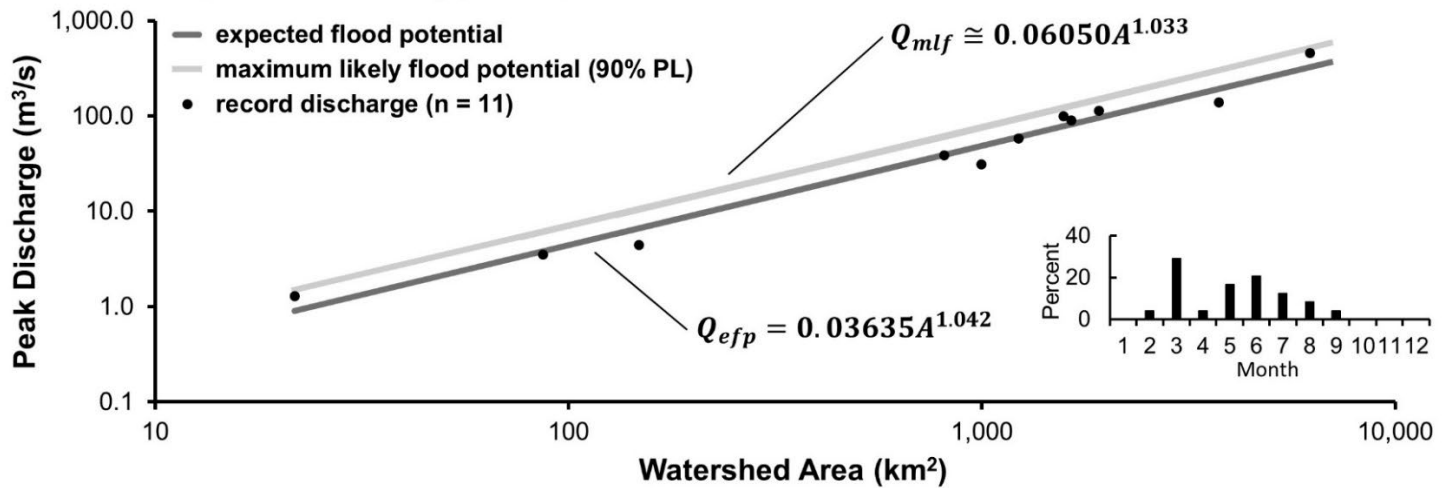
$R^2 = 0.63; 0.69$



**Zone 55W: High Plains, West ( $P_f = 2.0$ )**

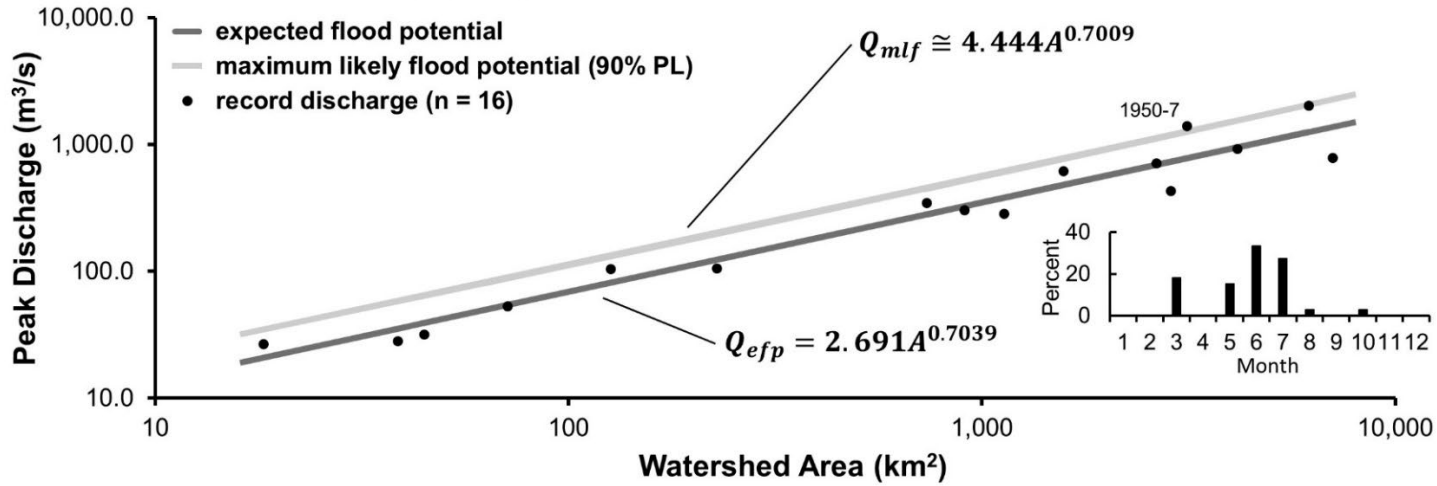


**Zone 55N: High Plains, North ( $P_f = 0.52$ )**



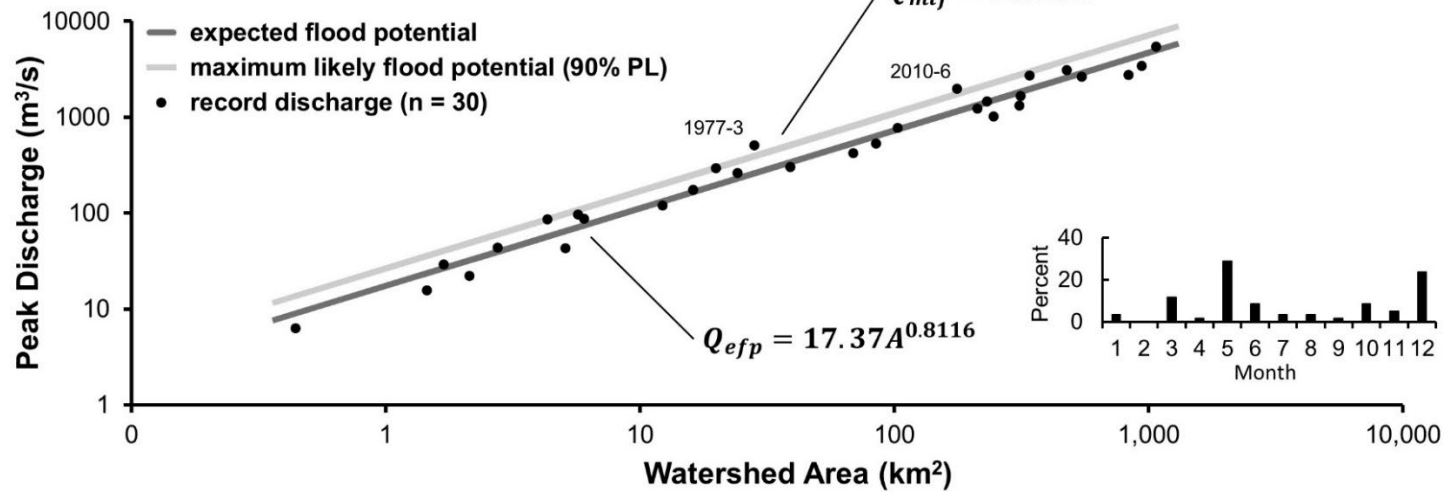
**Zone 55E: High Plains, East ( $P_f = 5.3$ )**

$R^2 = 0.94$



**Zone 57: Ouachita Mountains ( $P_f = 62.2$ )**

$R^2 = 0.97$

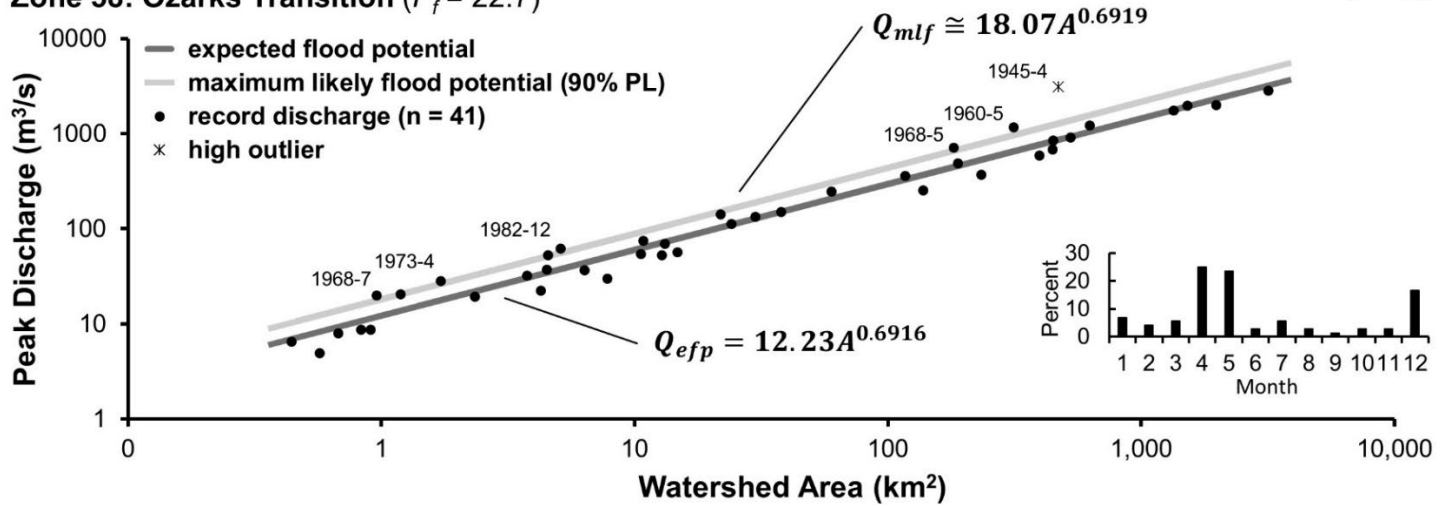


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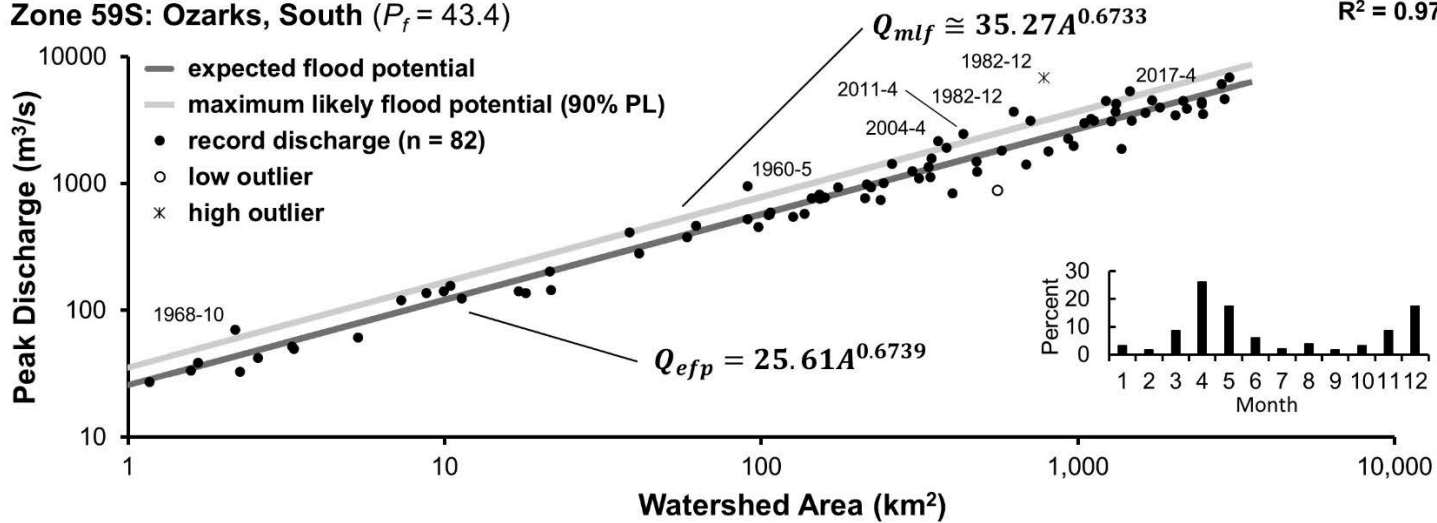
**Zone 58: Ozarks Transition ( $P_f = 22.7$ )**

$R^2 = 0.97$

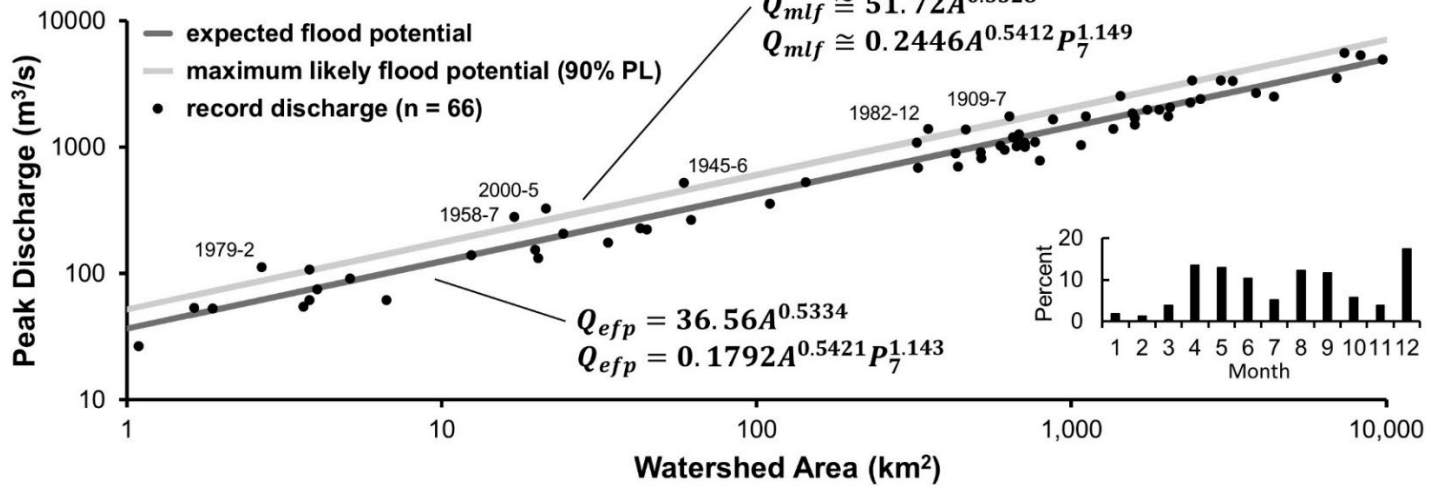


**Zone 59S: Ozarks, South ( $P_f = 43.4$ )**

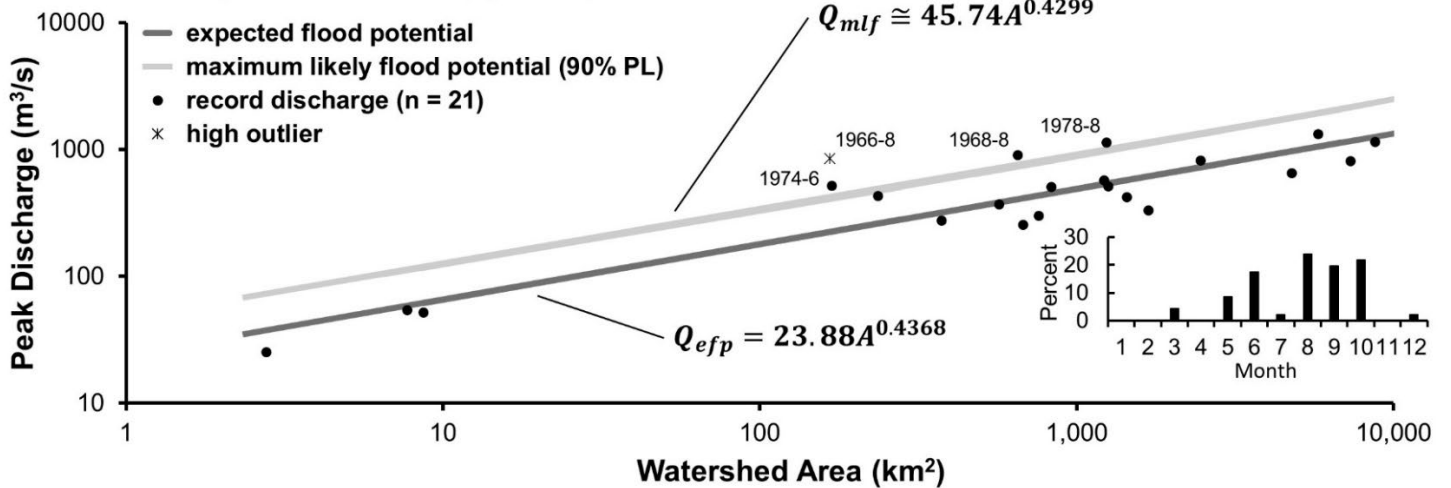
$R^2 = 0.97$



**Zone 59N: Ozarks, North ( $P_f = 30.9$ )**



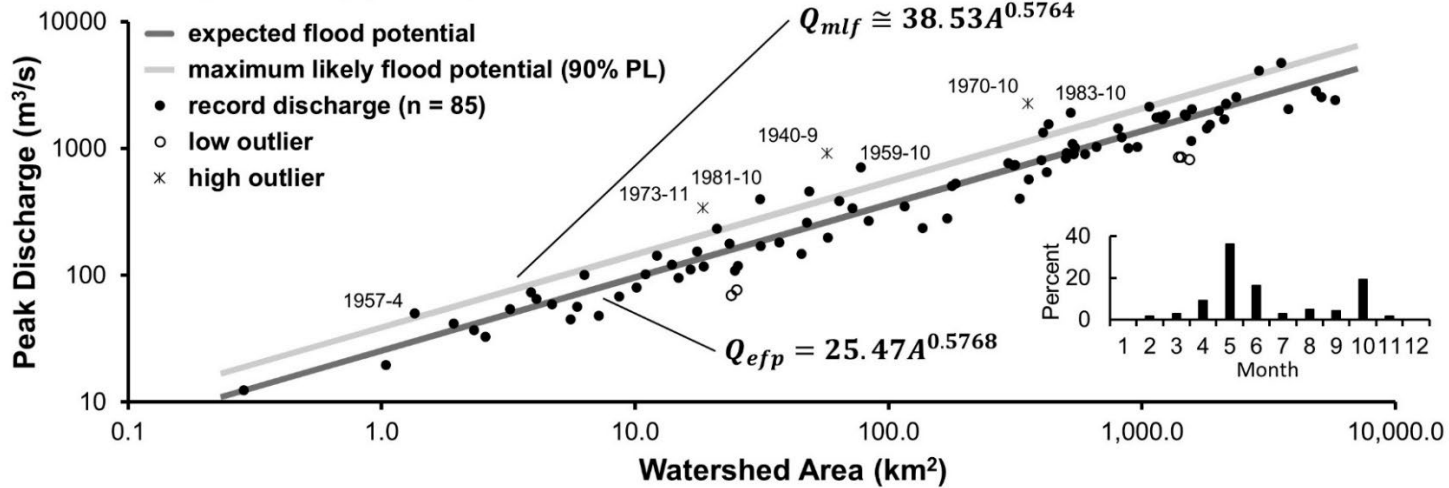
**Zone 60S: Osage Plains, South ( $P_f = 13.0$ )**





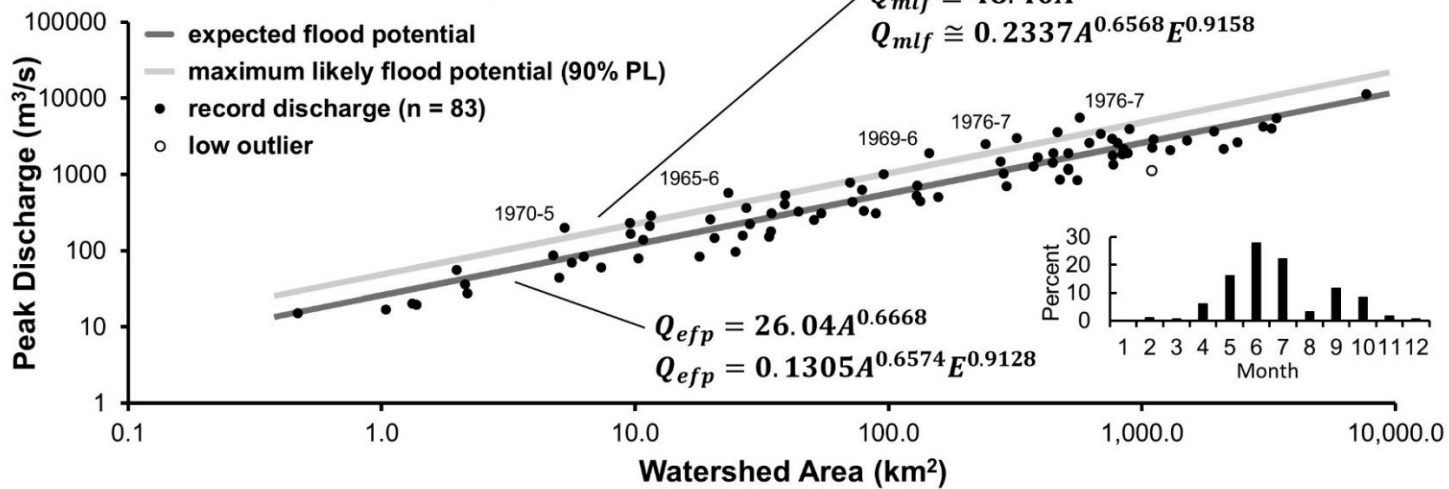
**Zone 60: Osage Plains ( $P_f = 26.5$ )**

$R^2 = 0.95$



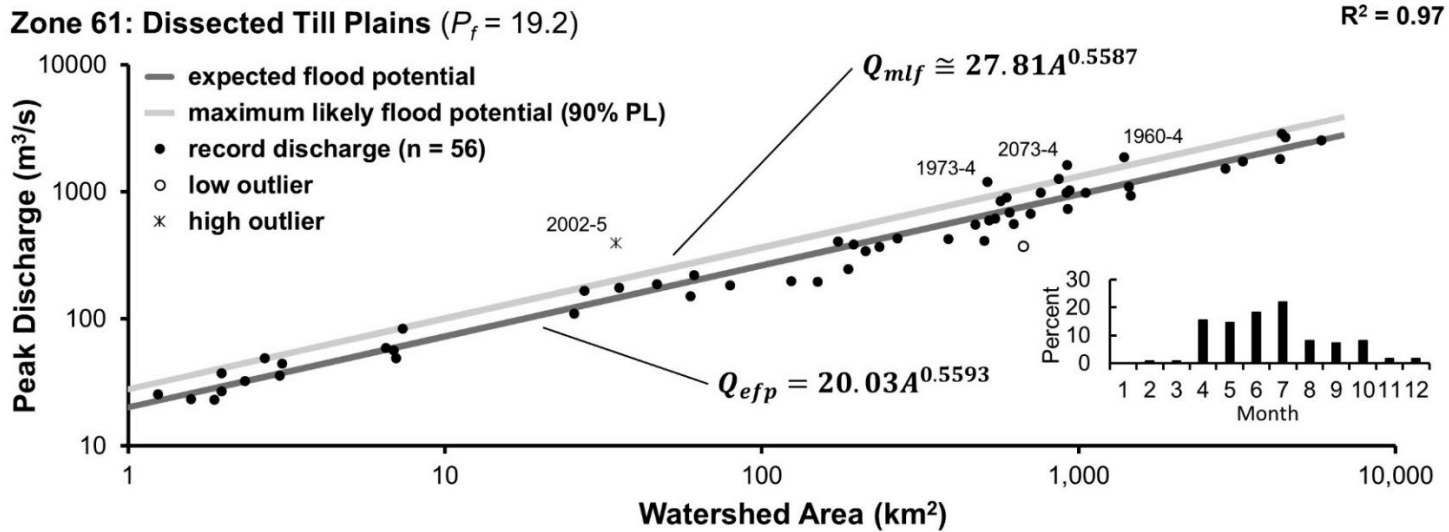
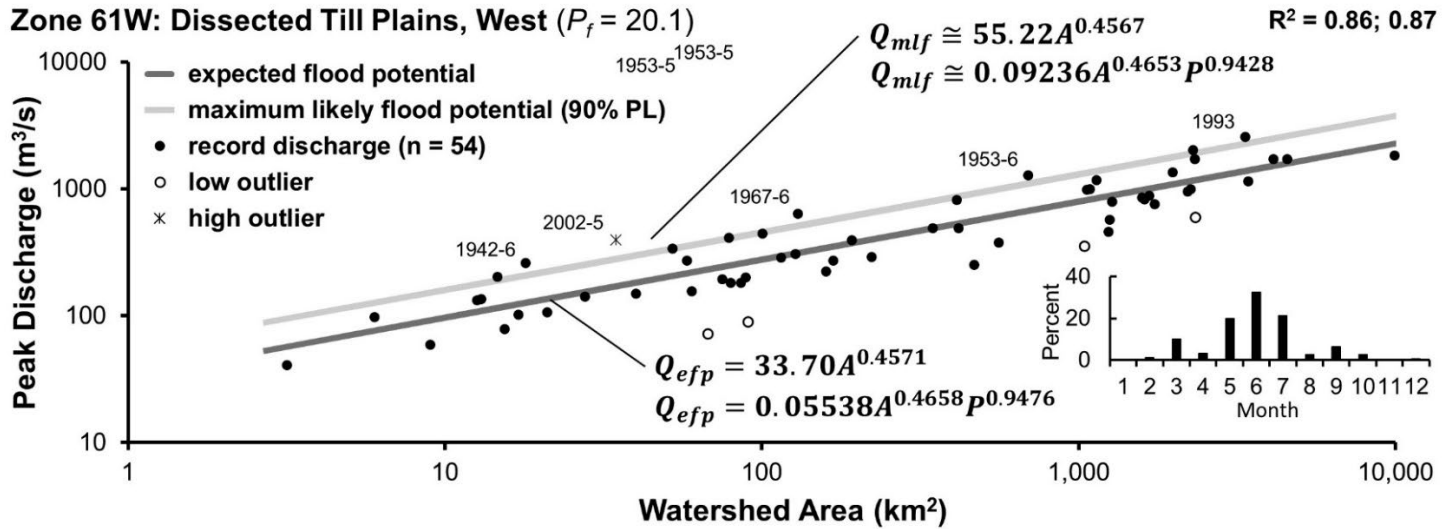
**Zone 60N: Osage Plains, North ( $P_f = 42.5$ )**

$R^2 = 0.91; 0.92$



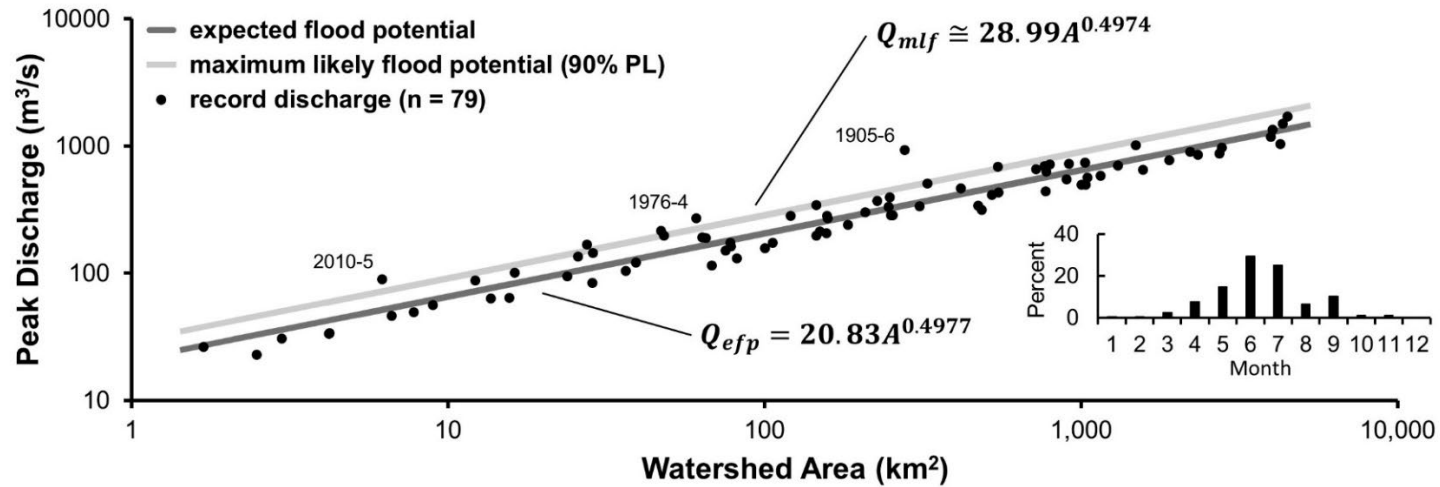
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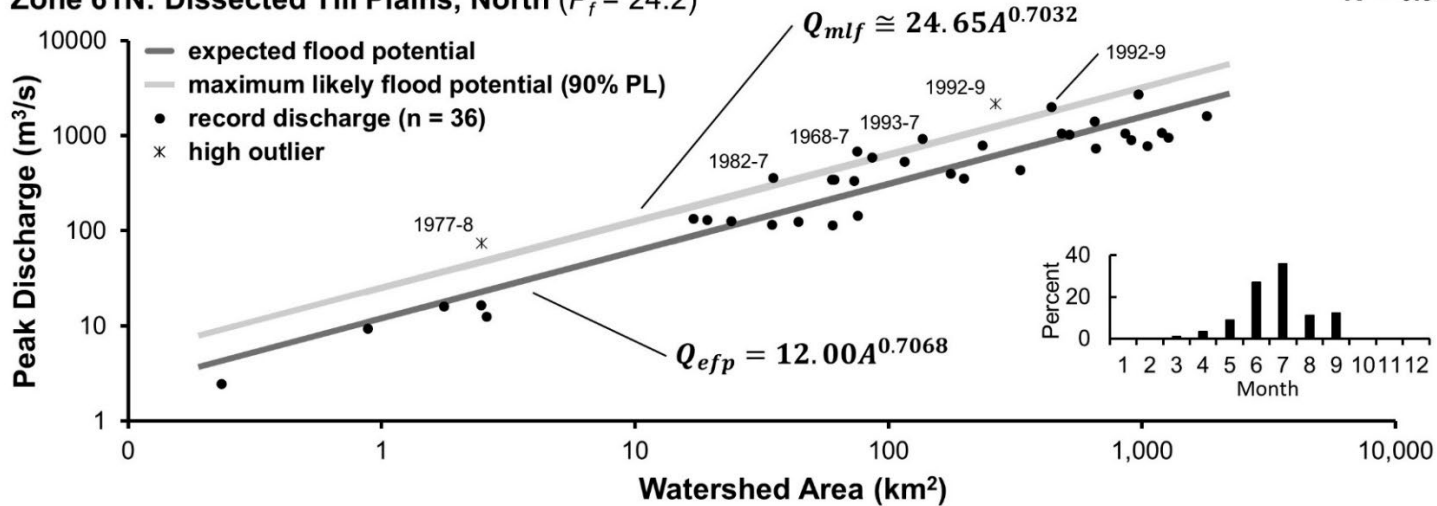
**Zone 61E: Dissected Till Plains, East ( $P_f = 14.9$ )**

$R^2 = 0.94$



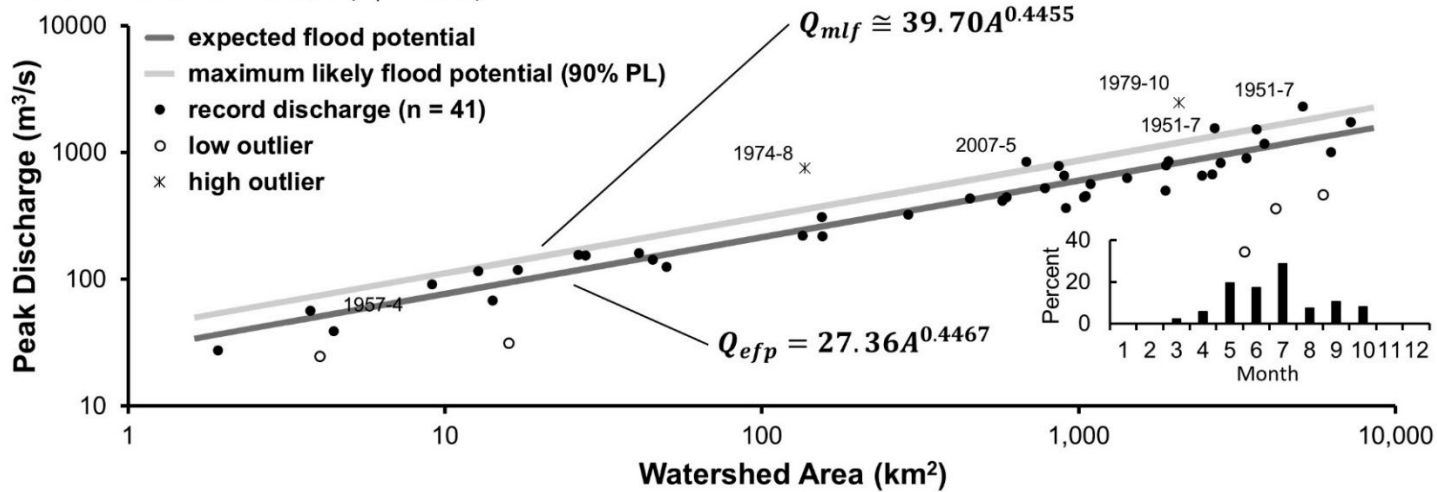
**Zone 61N: Dissected Till Plains, North ( $P_f = 24.2$ )**

$R^2 = 0.90$



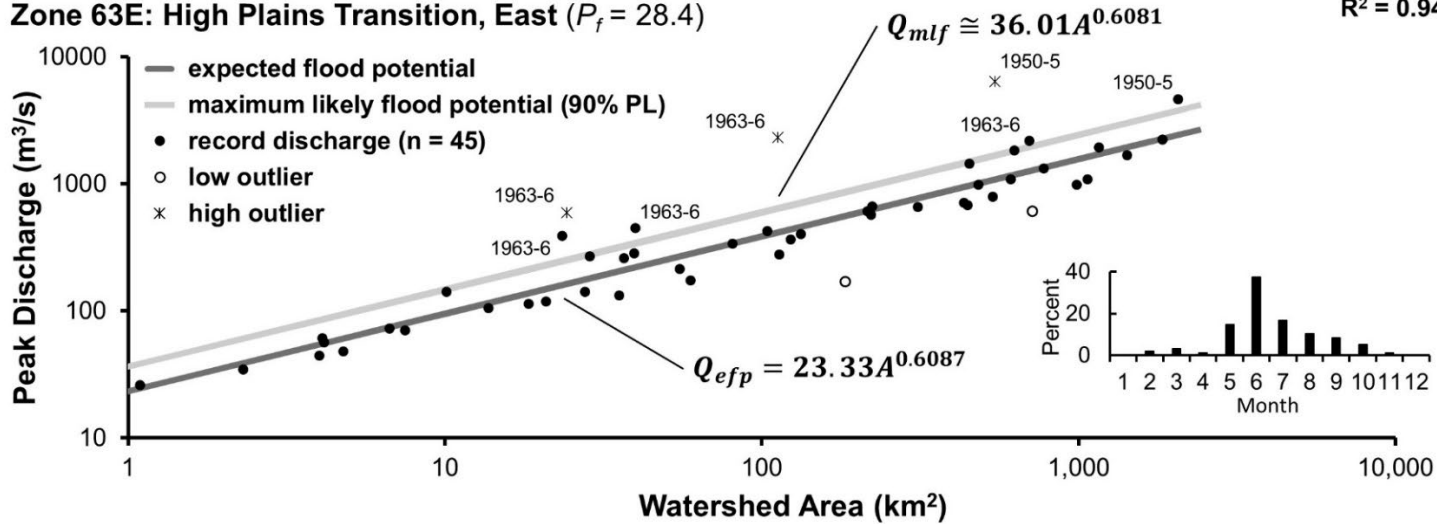
**Zone 62: Plains Border ( $P_f = 15.6$ )**

$R^2 = 0.93$



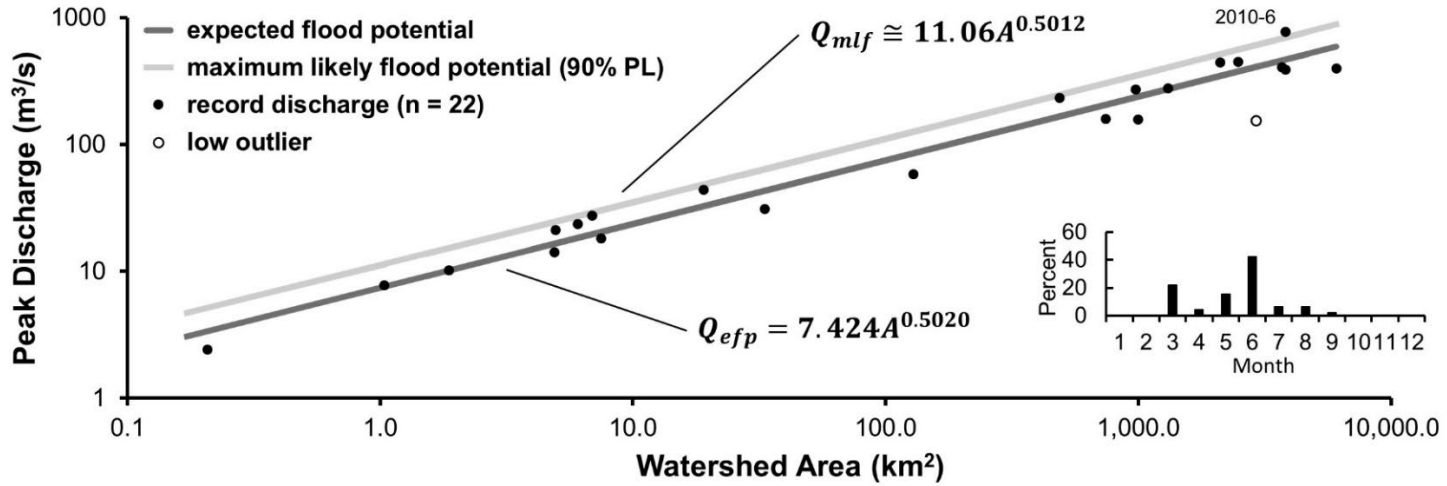
**Zone 63E: High Plains Transition, East ( $P_f = 28.4$ )**

$R^2 = 0.94$



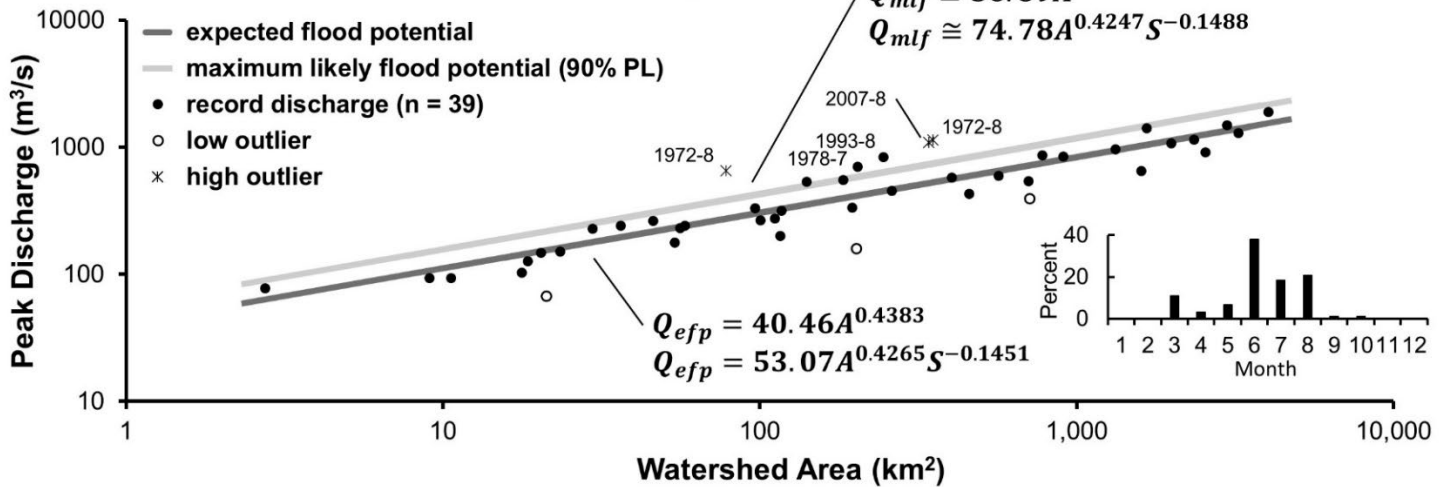
**Zone 63: High Plains Transition ( $P_f = 5.4$ )**

$R^2 = 0.97$

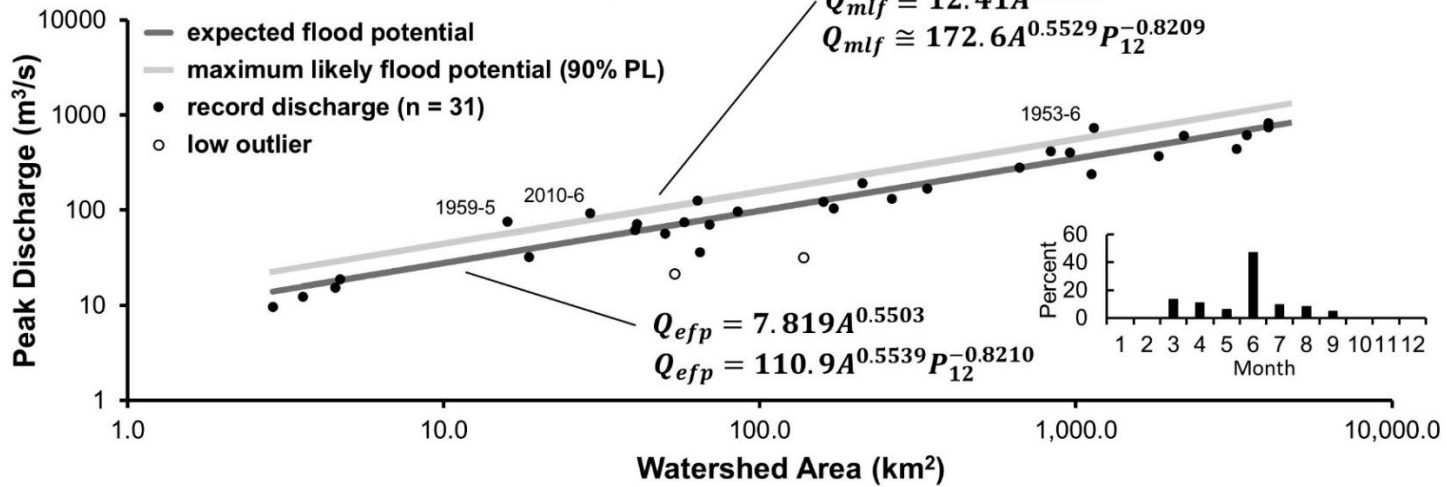


**Zone 64W: Mississippi River Transition, West ( $P_f = 22.2$ )**

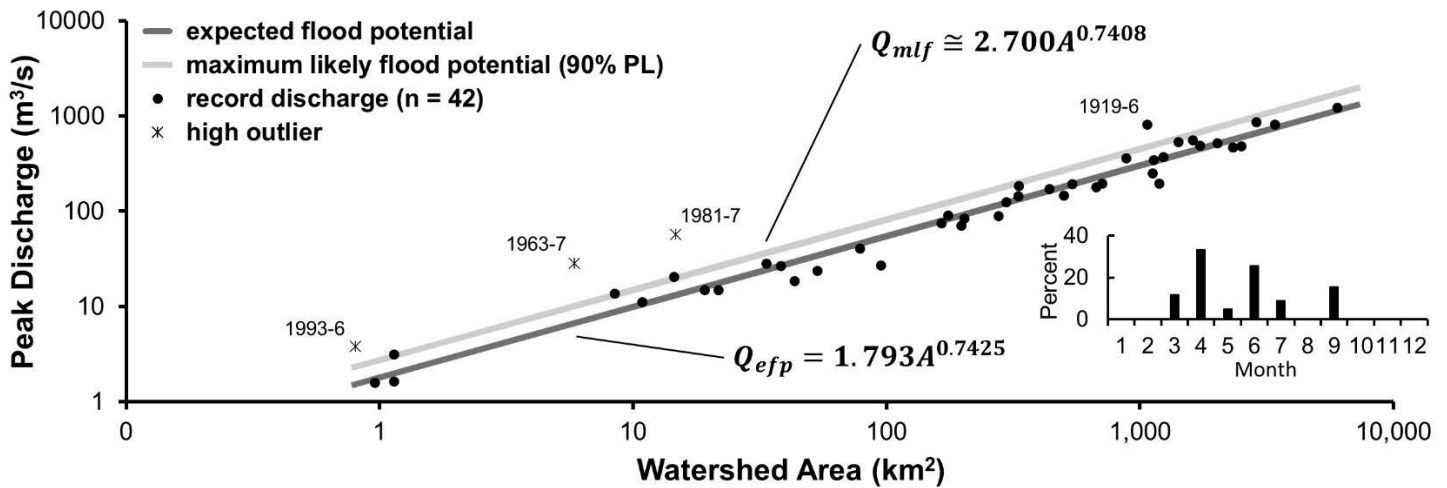
$R^2 = 0.91; 0.92$

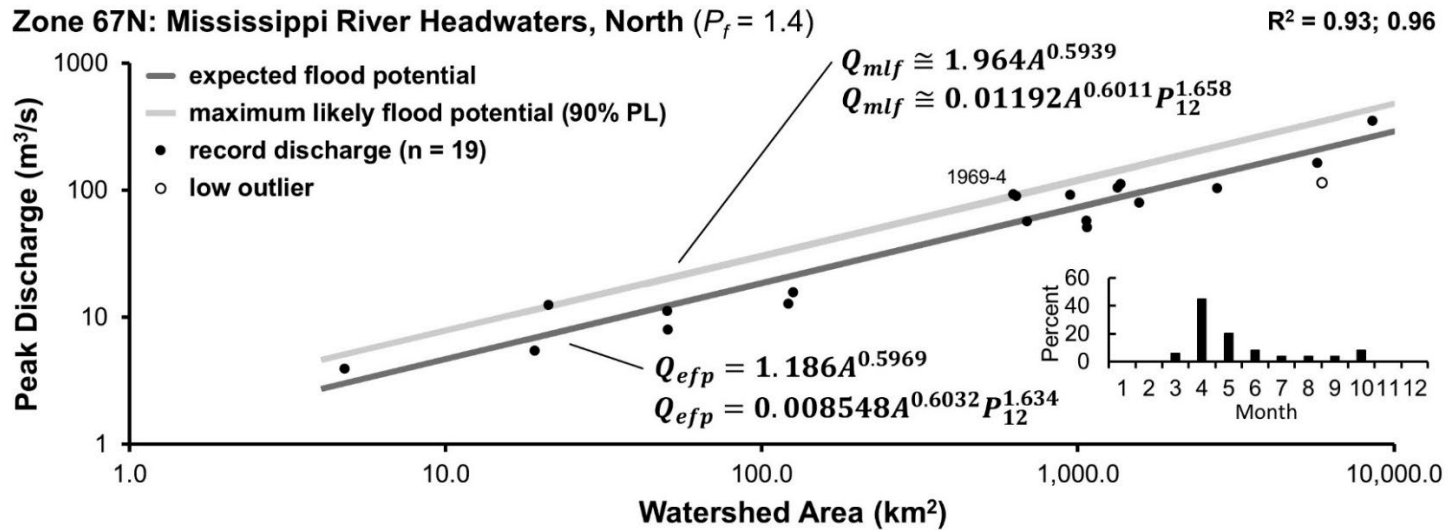
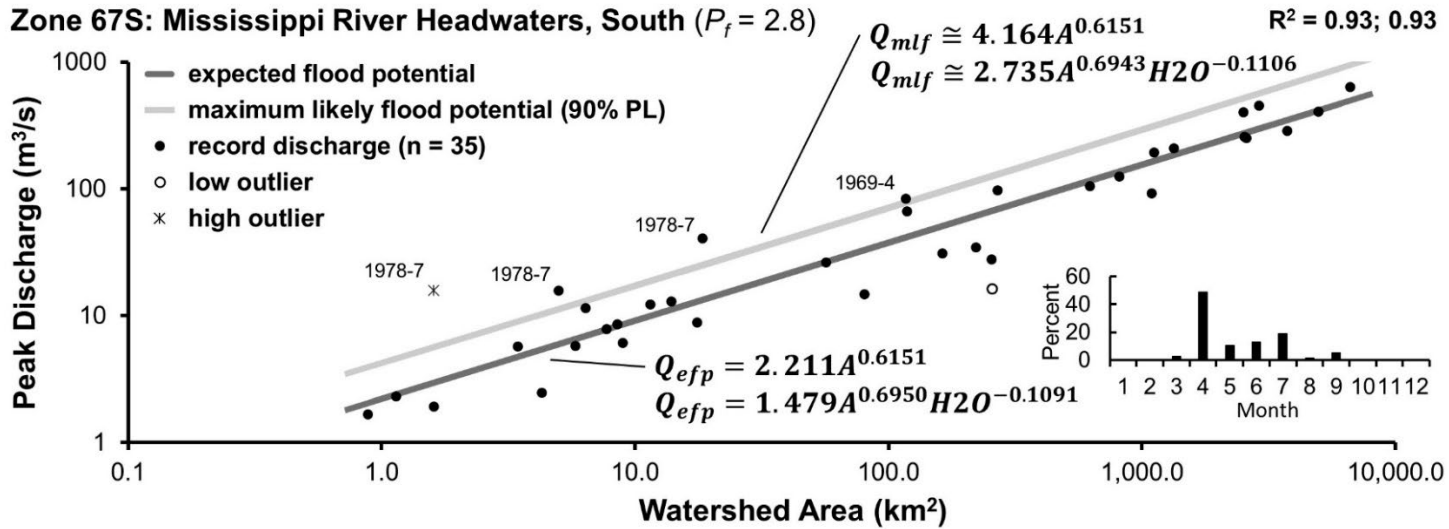


**Zone 65: Des Moines River Headwaters ( $P_f = 7.2$ )**



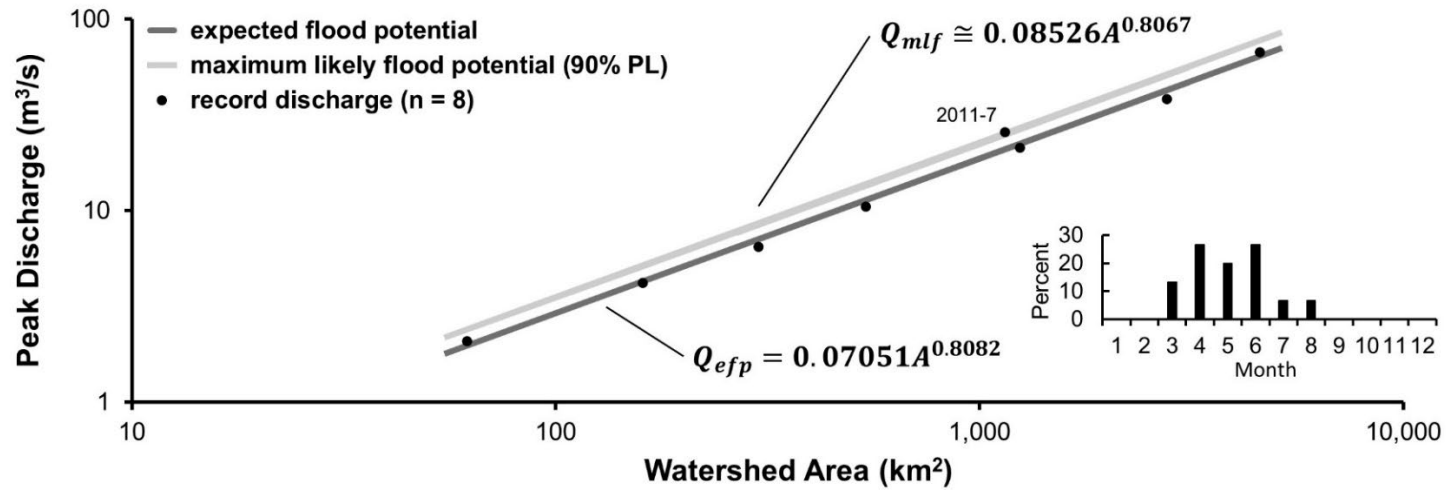
**Zone 66: Minnesota River ( $P_f = 4.4$ )**





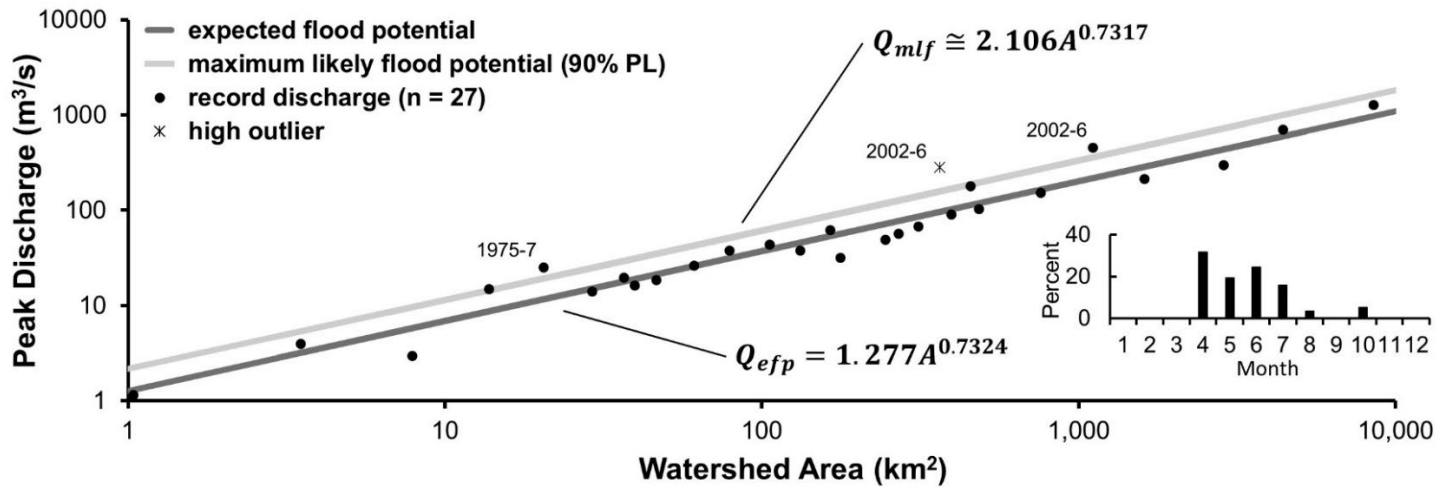
**Zone 67W: White Earth & Lake Headwaters ( $P_f = 0.25$ )**

$R^2 = 0.99$



**Zone 68: Northern Minnesota ( $P_f = 2.9$ )**

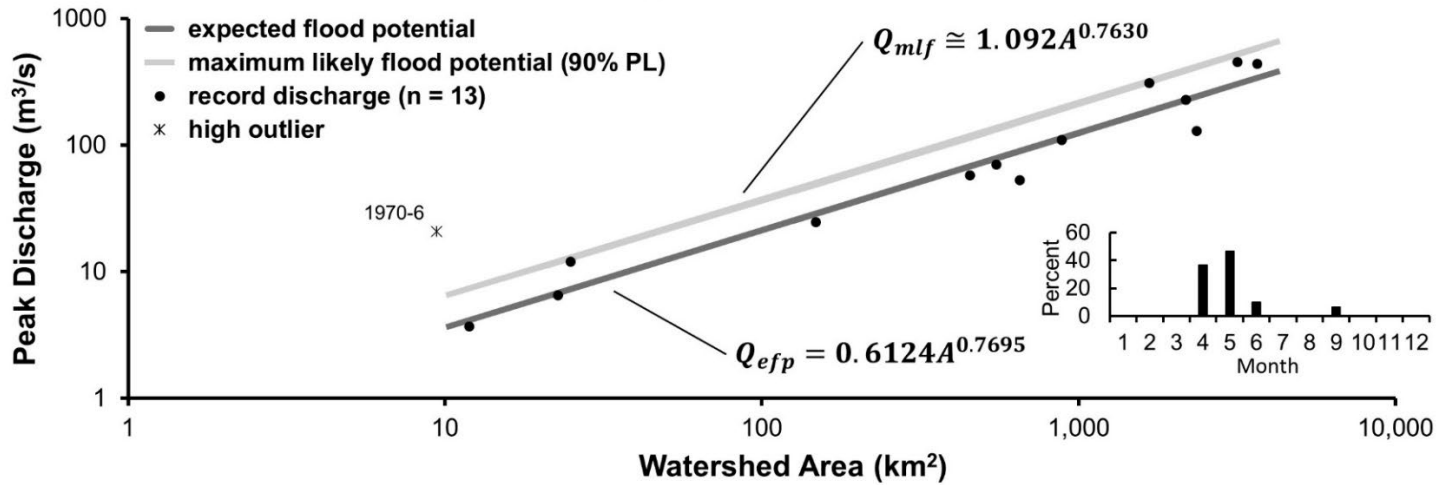
$R^2 = 0.95$





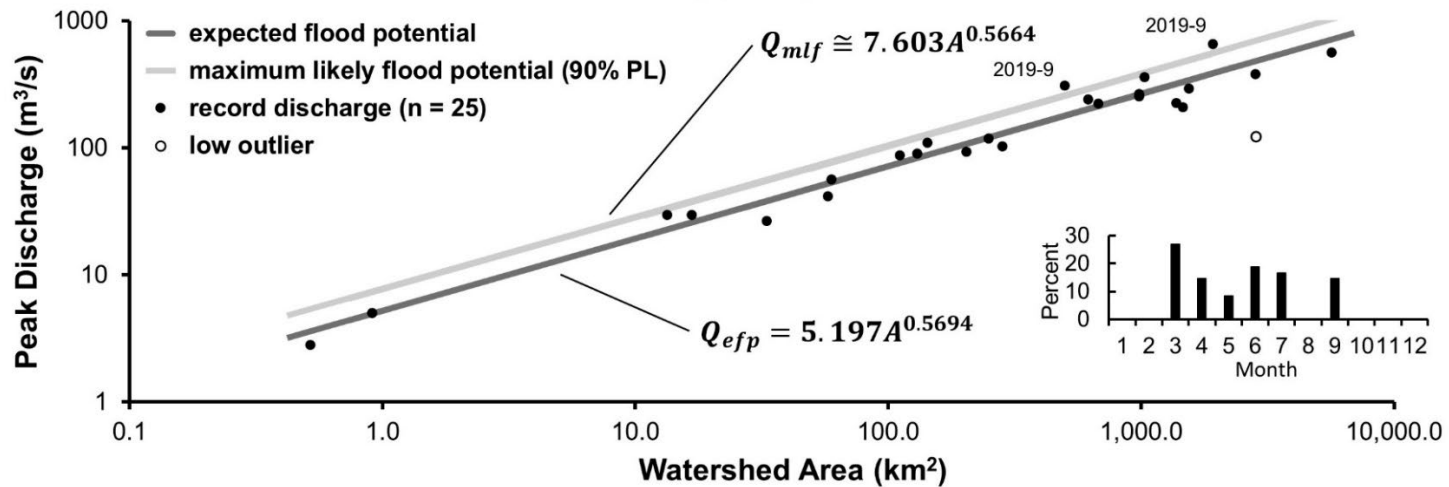
**Zone 68NE: Northern Minnesota, Northeast ( $P_f = 1.7$ )**

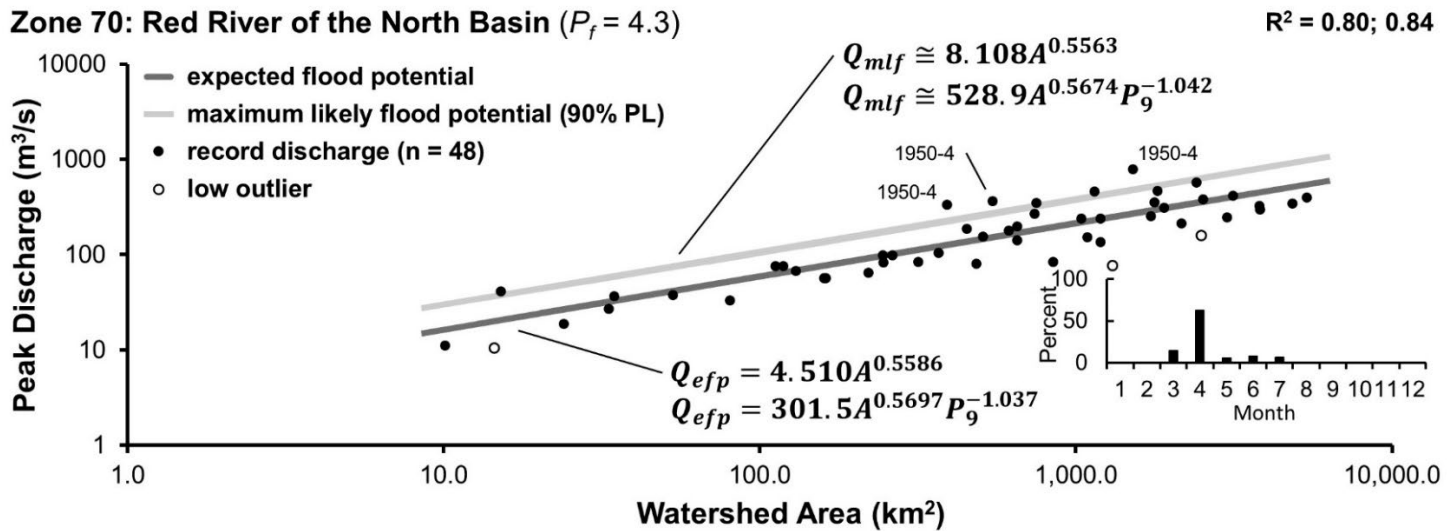
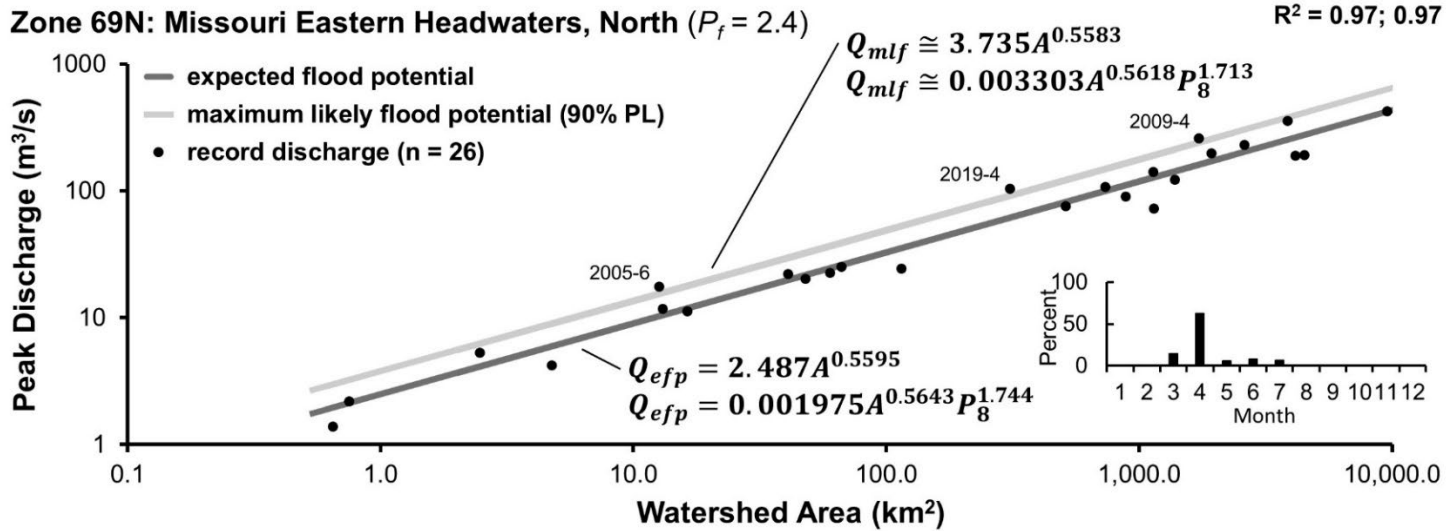
$R^2 = 0.94$



**Zone 69S: Missouri Eastern Headwaters, South ( $P_f = 5.2$ )**

$R^2 = 0.96$





Zone 70NW: Red River of the North Basin, Northwest ( $P_f = 2.1$ )

$R^2 = 0.93; 0.94$

