



NOAA Atlas 14, Volume 1, Version 5
Location name: Rio Rancho, New Mexico, USA*
Latitude: 35.2375°, Longitude: -106.7216°
Elevation: 5558.54 ft**

* source: ESRI Maps
 ** source: USGS



POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

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PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches) ¹										
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.168 (0.144-0.196)	0.218 (0.187-0.255)	0.293 (0.250-0.343)	0.351 (0.299-0.410)	0.432 (0.365-0.503)	0.494 (0.417-0.576)	0.561 (0.470-0.653)	0.631 (0.525-0.734)	0.726 (0.598-0.846)	0.803 (0.656-0.934)
10-min	0.256 (0.220-0.299)	0.332 (0.284-0.388)	0.446 (0.380-0.522)	0.535 (0.455-0.624)	0.657 (0.556-0.766)	0.752 (0.635-0.877)	0.853 (0.714-0.994)	0.960 (0.798-1.12)	1.11 (0.910-1.29)	1.22 (0.998-1.42)
15-min	0.317 (0.273-0.371)	0.411 (0.352-0.480)	0.552 (0.471-0.647)	0.663 (0.564-0.774)	0.814 (0.689-0.950)	0.933 (0.787-1.09)	1.06 (0.885-1.23)	1.19 (0.990-1.39)	1.37 (1.13-1.60)	1.52 (1.24-1.76)
30-min	0.427 (0.367-0.499)	0.553 (0.473-0.647)	0.744 (0.635-0.871)	0.892 (0.760-1.04)	1.10 (0.928-1.28)	1.26 (1.06-1.46)	1.43 (1.19-1.66)	1.60 (1.33-1.87)	1.85 (1.52-2.15)	2.04 (1.67-2.37)
60-min	0.529 (0.454-0.618)	0.685 (0.586-0.801)	0.920 (0.786-1.08)	1.10 (0.940-1.29)	1.36 (1.15-1.58)	1.55 (1.31-1.81)	1.76 (1.48-2.05)	1.98 (1.65-2.31)	2.29 (1.88-2.66)	2.53 (2.06-2.94)
2-hr	0.618 (0.527-0.735)	0.791 (0.673-0.942)	1.05 (0.889-1.25)	1.26 (1.06-1.48)	1.54 (1.29-1.82)	1.78 (1.48-2.09)	2.02 (1.67-2.37)	2.28 (1.87-2.67)	2.65 (2.15-3.10)	2.94 (2.36-3.45)
3-hr	0.673 (0.580-0.797)	0.857 (0.736-1.01)	1.12 (0.965-1.32)	1.34 (1.14-1.57)	1.63 (1.38-1.91)	1.87 (1.58-2.19)	2.12 (1.78-2.48)	2.39 (1.99-2.80)	2.76 (2.27-3.23)	3.07 (2.50-3.59)
6-hr	0.774 (0.673-0.906)	0.978 (0.852-1.15)	1.26 (1.10-1.47)	1.49 (1.29-1.73)	1.79 (1.54-2.08)	2.03 (1.74-2.36)	2.29 (1.95-2.65)	2.55 (2.16-2.95)	2.92 (2.44-3.38)	3.22 (2.67-3.73)
12-hr	0.868 (0.763-0.993)	1.10 (0.963-1.25)	1.39 (1.22-1.59)	1.62 (1.42-1.85)	1.94 (1.68-2.20)	2.18 (1.89-2.48)	2.43 (2.09-2.76)	2.69 (2.30-3.06)	3.04 (2.58-3.47)	3.33 (2.80-3.80)
24-hr	0.996 (0.881-1.14)	1.25 (1.11-1.42)	1.57 (1.39-1.78)	1.82 (1.61-2.07)	2.16 (1.90-2.45)	2.42 (2.12-2.75)	2.70 (2.36-3.06)	2.98 (2.59-3.37)	3.36 (2.89-3.79)	3.65 (3.13-4.13)
2-day	1.06 (0.936-1.19)	1.32 (1.18-1.49)	1.66 (1.48-1.87)	1.93 (1.71-2.16)	2.29 (2.02-2.57)	2.56 (2.25-2.87)	2.85 (2.50-3.19)	3.14 (2.74-3.52)	3.53 (3.06-3.97)	3.84 (3.31-4.32)
3-day	1.20 (1.08-1.33)	1.50 (1.35-1.66)	1.86 (1.68-2.06)	2.15 (1.93-2.37)	2.53 (2.27-2.80)	2.83 (2.53-3.12)	3.13 (2.79-3.46)	3.43 (3.05-3.79)	3.84 (3.39-4.25)	4.15 (3.65-4.60)
4-day	1.35 (1.23-1.48)	1.67 (1.53-1.83)	2.06 (1.88-2.25)	2.37 (2.16-2.58)	2.78 (2.53-3.03)	3.09 (2.81-3.37)	3.40 (3.09-3.72)	3.72 (3.36-4.06)	4.14 (3.73-4.53)	4.46 (4.00-4.89)
7-day	1.55 (1.42-1.69)	1.93 (1.77-2.10)	2.36 (2.16-2.57)	2.69 (2.47-2.93)	3.13 (2.86-3.40)	3.46 (3.16-3.76)	3.79 (3.45-4.12)	4.11 (3.74-4.47)	4.53 (4.11-4.93)	4.85 (4.38-5.28)
10-day	1.72 (1.58-1.87)	2.13 (1.96-2.32)	2.62 (2.40-2.84)	3.00 (2.75-3.25)	3.50 (3.21-3.79)	3.88 (3.55-4.20)	4.26 (3.89-4.62)	4.64 (4.22-5.03)	5.14 (4.65-5.57)	5.51 (4.96-5.98)
20-day	2.17 (1.99-2.37)	2.70 (2.48-2.94)	3.28 (3.01-3.57)	3.72 (3.41-4.04)	4.29 (3.93-4.65)	4.70 (4.30-5.09)	5.09 (4.65-5.52)	5.47 (4.99-5.93)	5.95 (5.41-6.45)	6.29 (5.71-6.84)
30-day	2.61 (2.40-2.83)	3.25 (2.98-3.51)	3.92 (3.60-4.24)	4.41 (4.05-4.76)	5.04 (4.62-5.43)	5.48 (5.02-5.91)	5.91 (5.40-6.37)	6.31 (5.76-6.80)	6.80 (6.19-7.33)	7.14 (6.49-7.71)
45-day	3.19 (2.94-3.45)	3.95 (3.65-4.27)	4.72 (4.35-5.09)	5.27 (4.86-5.68)	5.94 (5.47-6.41)	6.41 (5.90-6.91)	6.83 (6.28-7.36)	7.21 (6.63-7.77)	7.66 (7.04-8.25)	7.95 (7.30-8.57)
60-day	3.67 (3.39-3.97)	4.55 (4.20-4.92)	5.43 (5.02-5.87)	6.06 (5.60-6.55)	6.83 (6.31-7.38)	7.36 (6.79-7.94)	7.84 (7.24-8.47)	8.28 (7.64-8.95)	8.79 (8.11-9.51)	9.12 (8.42-9.87)

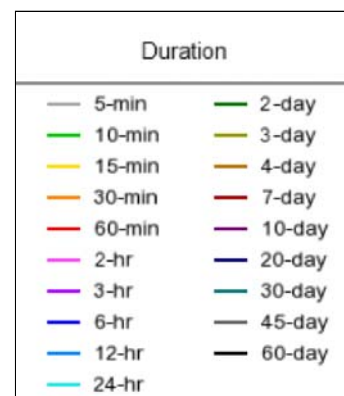
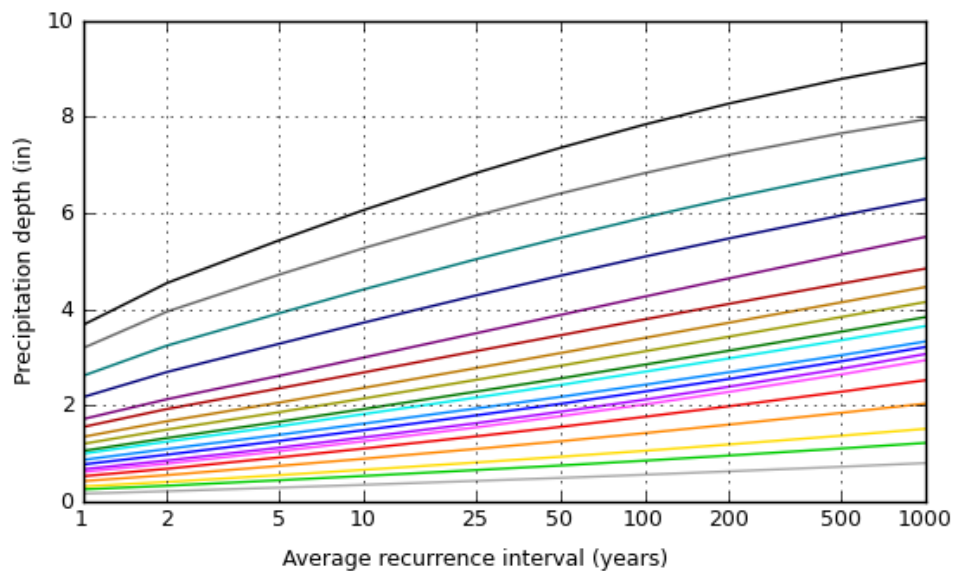
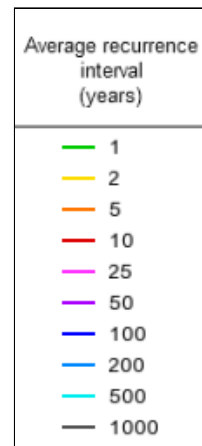
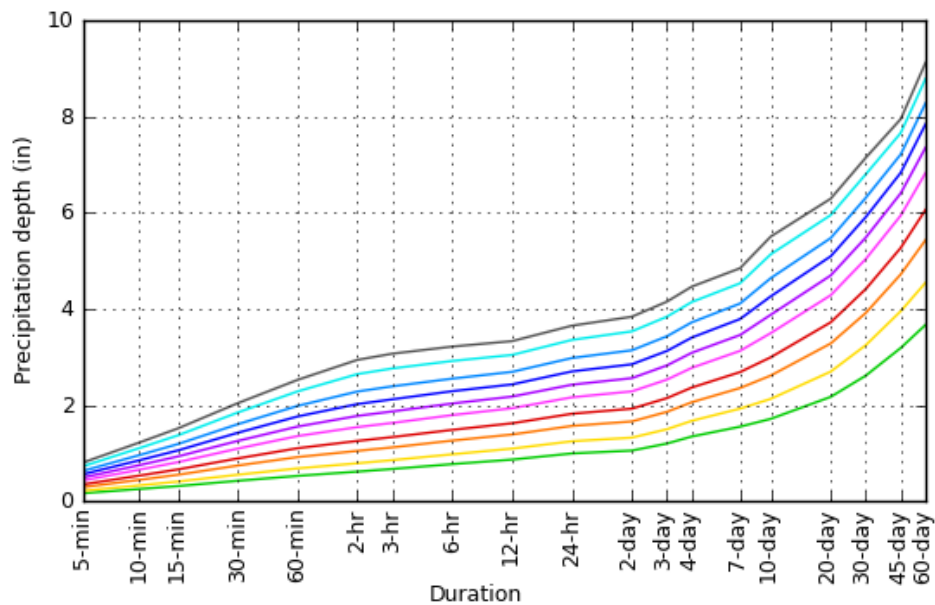
¹ Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).
 Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.
 Please refer to NOAA Atlas 14 document for more information.

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PF graphical

PDS-based depth-duration-frequency (DDF) curves

Latitude: 35.2375°, Longitude: -106.7216°

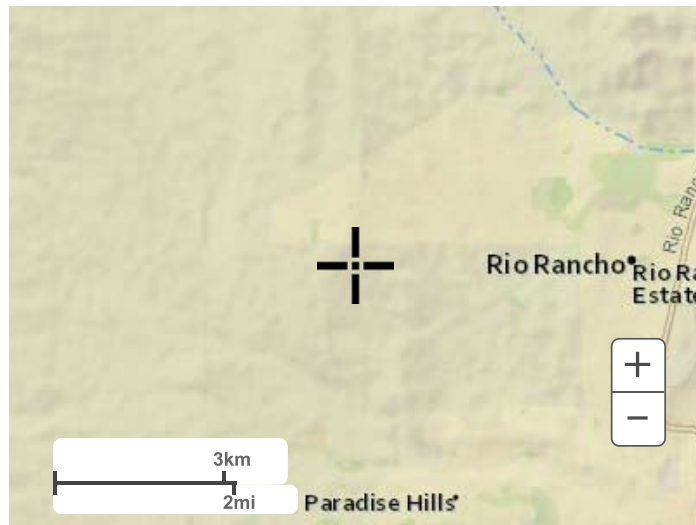


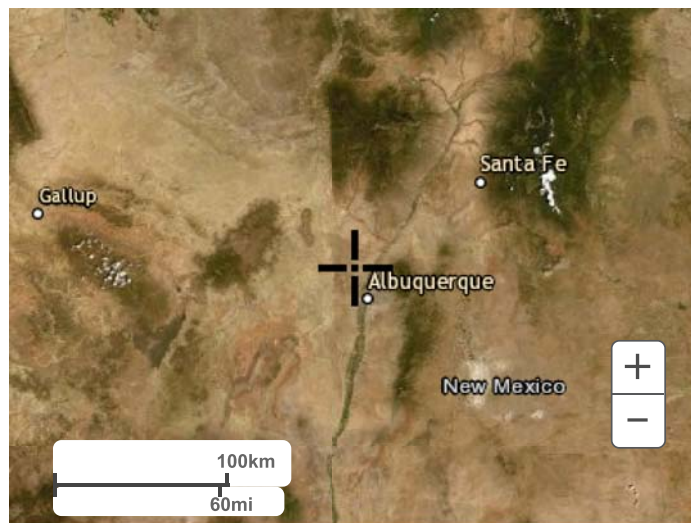
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Created (GMT): Wed Jul 17 16:35:07 2019

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Small scale terrain

**Large scale terrain****Large scale map****Large scale aerial**



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[National Oceanic and Atmospheric Administration](#)
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[National Water Center](#)
1325 East West Highway
Silver Spring, MD 20910
Questions?: HDSC.Questions@noaa.gov

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Southern Sandoval County Arroyo Flood Control Authority

Design Rainfall

Project Name: Los Diamantes Regional Pond
Watershed: Calabacillas

Prepared By: CRH
Date: 1-Aug-19

Input Data

Recurrence Interval¹: 10 years
Storm Duration²: 24 hours
Watershed Area: 1 sq. miles

Storm Event	Point Rainfall Depth ³ inches	Depth-Area Reduction Factor	Adjusted Rainfall Depth ⁴ inches
10-Year, 1-Hour	1.100	1.000	1.100
10-Year, 6-Hour	1.490	1.000	1.490
10-Year, 24-Hour	1.820	1.000	1.820

Notes:

1. Recurrence interval must be one of the following: 1, 2, 5, 10, 25, 50, 100 or 500 years
2. Storm duration must be either 6 or 24 hours
3. Point rainfall depths are taken from NOAA Precipitation Frequency Data Server
4. Adjusted rainfall depths are based on Figure F-1 of the DPM

Southern Sandoval County Arroyo Flood Control Authority

Design Rainfall

Project Name: Los Diamantes Regional Pond
Watershed: Calabacillas

Prepared By: CRH
Date: 1-Aug-19

Input Data

Recurrence Interval¹: 100 years
Storm Duration²: 24 hours
Watershed Area: 1 sq. miles

Storm Event	Point Rainfall Depth ³ inches	Depth-Area Reduction Factor	Adjusted Rainfall Depth ⁴ inches
100-Year, 1-Hour	1.760	1.000	1.760
100-Year, 6-Hour	2.290	1.000	2.290
100-Year, 24-Hour	2.700	1.000	2.700

Notes:

1. Recurrence interval must be one of the following: 1, 2, 5, 10, 25, 50, 100 or 500 years
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Design Rainfall

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Watershed: Calabacillas

Prepared By: CRH
Date: 1-Aug-19

Input Data

Recurrence Interval¹: 100 years
Storm Duration²: 24 hours
Watershed Area: 69 sq. miles

Storm Event	Point Rainfall Depth ³ inches	Depth-Area Reduction Factor	Adjusted Rainfall Depth ⁴ inches
100-Year, 1-Hour	1.760	0.765	1.347
100-Year, 6-Hour	2.290	0.910	2.084
100-Year, 24-Hour	2.700	0.944	2.549

Notes:

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Southern Sandoval County Arroyo Flood Control Authority

Design Rainfall

Project Name: Los Diamantes Regional Pond
Watershed: Calabacillas

Prepared By: CRH
Date: 1-Aug-19

Input Data

Recurrence Interval¹: 500 years
Storm Duration²: 24 hours
Watershed Area: 1 sq. miles

Storm Event	Point Rainfall Depth ³ inches	Depth-Area Reduction Factor	Adjusted Rainfall Depth ⁴ inches
500-Year, 1-Hour	2.290	1.000	2.290
500-Year, 6-Hour	2.920	1.000	2.920
500-Year, 24-Hour	3.360	1.000	3.360

Notes:

1. Recurrence interval must be one of the following: 1, 2, 5, 10, 25, 50, 100 or 500 years
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