



NOAA Atlas 14, Volume 1, Version 5
Location name: Rio Rancho, New Mexico, USA*
Latitude: 35.2633°, Longitude: -106.7206°
Elevation: 5716.15 ft**



* source: ESRI Maps
 ** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

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NOAA, National Weather Service, Silver Spring, Maryland

[PF_tabular](#) | [PF_graphical](#) | [Maps_&_aerials](#)

PF tabular

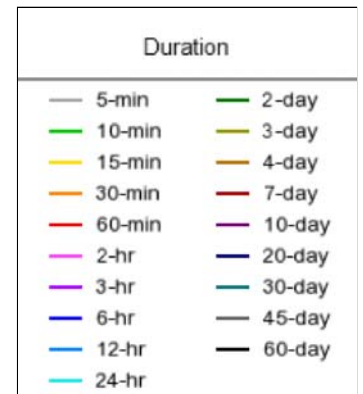
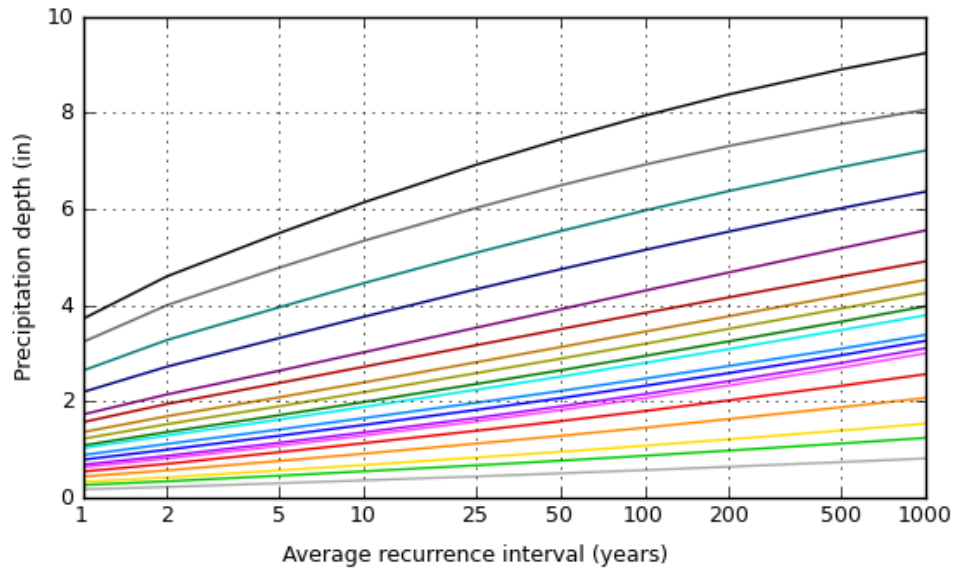
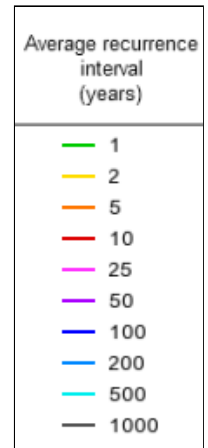
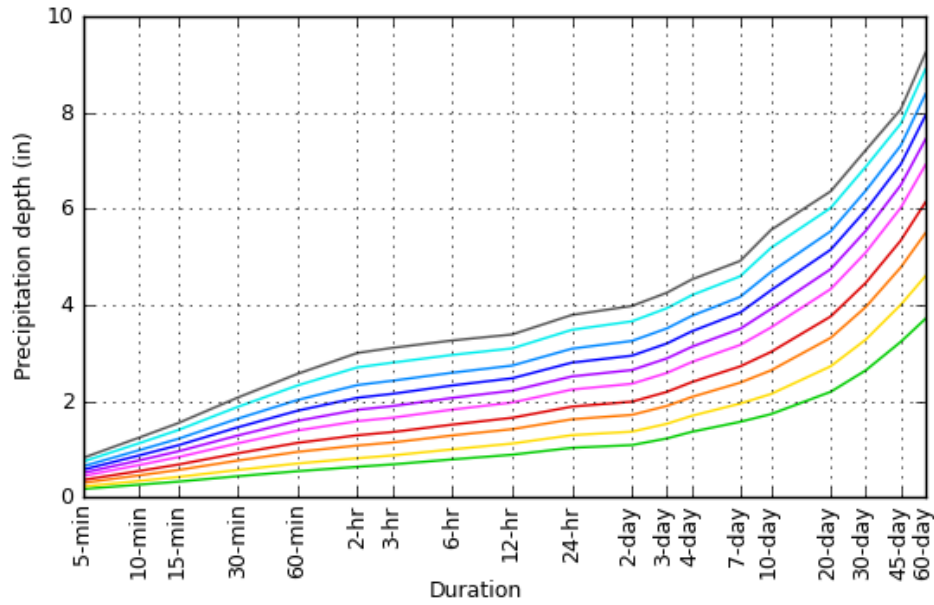
PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)¹										
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.173 (0.149-0.202)	0.224 (0.192-0.261)	0.300 (0.257-0.351)	0.360 (0.307-0.419)	0.442 (0.375-0.514)	0.506 (0.427-0.588)	0.573 (0.480-0.666)	0.644 (0.536-0.747)	0.740 (0.609-0.860)	0.816 (0.668-0.949)
10-min	0.263 (0.226-0.307)	0.341 (0.292-0.397)	0.457 (0.391-0.534)	0.548 (0.467-0.638)	0.672 (0.570-0.783)	0.769 (0.649-0.895)	0.872 (0.730-1.01)	0.980 (0.815-1.14)	1.13 (0.927-1.31)	1.24 (1.02-1.44)
15-min	0.326 (0.280-0.381)	0.423 (0.362-0.492)	0.567 (0.485-0.662)	0.680 (0.579-0.791)	0.834 (0.707-0.970)	0.954 (0.805-1.11)	1.08 (0.905-1.26)	1.21 (1.01-1.41)	1.40 (1.15-1.62)	1.54 (1.26-1.79)
30-min	0.439 (0.378-0.512)	0.568 (0.487-0.664)	0.764 (0.653-0.892)	0.915 (0.780-1.07)	1.12 (0.952-1.31)	1.29 (1.09-1.50)	1.46 (1.22-1.69)	1.64 (1.36-1.90)	1.88 (1.55-2.18)	2.07 (1.70-2.41)
60-min	0.543 (0.467-0.634)	0.704 (0.603-0.821)	0.945 (0.808-1.10)	1.13 (0.965-1.32)	1.39 (1.18-1.62)	1.59 (1.34-1.85)	1.80 (1.51-2.09)	2.02 (1.68-2.35)	2.33 (1.92-2.70)	2.57 (2.10-2.98)
2-hr	0.635 (0.540-0.756)	0.813 (0.691-0.971)	1.08 (0.912-1.28)	1.29 (1.09-1.53)	1.58 (1.33-1.87)	1.82 (1.52-2.15)	2.07 (1.71-2.44)	2.33 (1.92-2.74)	2.70 (2.19-3.17)	3.00 (2.41-3.53)
3-hr	0.685 (0.589-0.812)	0.871 (0.747-1.03)	1.14 (0.979-1.35)	1.36 (1.16-1.60)	1.66 (1.40-1.95)	1.90 (1.60-2.23)	2.15 (1.80-2.52)	2.42 (2.01-2.84)	2.80 (2.30-3.28)	3.11 (2.53-3.65)
6-hr	0.789 (0.685-0.927)	0.998 (0.867-1.17)	1.29 (1.12-1.50)	1.51 (1.31-1.77)	1.82 (1.57-2.13)	2.07 (1.77-2.40)	2.33 (1.98-2.70)	2.59 (2.19-3.01)	2.96 (2.48-3.44)	3.26 (2.70-3.79)
12-hr	0.886 (0.778-1.01)	1.12 (0.982-1.28)	1.42 (1.24-1.62)	1.65 (1.45-1.89)	1.97 (1.71-2.25)	2.22 (1.92-2.53)	2.48 (2.13-2.82)	2.74 (2.34-3.12)	3.10 (2.62-3.53)	3.39 (2.84-3.87)
24-hr	1.03 (0.913-1.17)	1.29 (1.15-1.47)	1.62 (1.44-1.85)	1.89 (1.67-2.14)	2.24 (1.97-2.54)	2.51 (2.20-2.85)	2.80 (2.45-3.17)	3.09 (2.68-3.49)	3.48 (3.00-3.94)	3.79 (3.25-4.29)
2-day	1.09 (0.966-1.23)	1.37 (1.21-1.54)	1.71 (1.52-1.93)	1.99 (1.76-2.24)	2.36 (2.09-2.65)	2.65 (2.33-2.97)	2.95 (2.58-3.31)	3.25 (2.83-3.65)	3.66 (3.17-4.12)	3.98 (3.43-4.48)
3-day	1.22 (1.11-1.36)	1.53 (1.38-1.70)	1.90 (1.72-2.10)	2.19 (1.98-2.42)	2.59 (2.33-2.86)	2.89 (2.59-3.19)	3.20 (2.86-3.54)	3.51 (3.12-3.88)	3.93 (3.47-4.35)	4.25 (3.74-4.72)
4-day	1.36 (1.25-1.49)	1.69 (1.55-1.85)	2.09 (1.91-2.28)	2.40 (2.19-2.61)	2.81 (2.56-3.07)	3.13 (2.85-3.41)	3.45 (3.13-3.76)	3.77 (3.41-4.11)	4.20 (3.78-4.59)	4.53 (4.05-4.95)
7-day	1.57 (1.44-1.71)	1.95 (1.79-2.12)	2.38 (2.19-2.59)	2.72 (2.50-2.96)	3.17 (2.90-3.44)	3.50 (3.20-3.80)	3.84 (3.50-4.17)	4.17 (3.79-4.52)	4.59 (4.16-4.99)	4.91 (4.44-5.35)
10-day	1.73 (1.59-1.88)	2.15 (1.98-2.34)	2.64 (2.43-2.86)	3.02 (2.78-3.27)	3.53 (3.24-3.82)	3.91 (3.58-4.23)	4.30 (3.93-4.65)	4.68 (4.26-5.07)	5.18 (4.70-5.61)	5.56 (5.01-6.03)
20-day	2.19 (2.02-2.38)	2.73 (2.51-2.97)	3.32 (3.05-3.60)	3.76 (3.46-4.08)	4.33 (3.98-4.69)	4.75 (4.35-5.14)	5.15 (4.71-5.57)	5.53 (5.05-5.98)	6.02 (5.48-6.51)	6.36 (5.78-6.90)
30-day	2.64 (2.43-2.85)	3.28 (3.02-3.55)	3.96 (3.64-4.27)	4.46 (4.10-4.81)	5.09 (4.67-5.48)	5.54 (5.08-5.96)	5.97 (5.47-6.43)	6.38 (5.83-6.86)	6.87 (6.26-7.40)	7.22 (6.57-7.78)
45-day	3.23 (2.98-3.49)	4.00 (3.70-4.32)	4.78 (4.41-5.16)	5.34 (4.93-5.75)	6.02 (5.55-6.49)	6.49 (5.98-6.99)	6.92 (6.38-7.45)	7.31 (6.73-7.87)	7.77 (7.15-8.37)	8.07 (7.41-8.69)
60-day	3.71 (3.43-4.02)	4.60 (4.26-4.97)	5.50 (5.09-5.94)	6.14 (5.68-6.62)	6.92 (6.40-7.46)	7.45 (6.89-8.03)	7.94 (7.34-8.57)	8.39 (7.74-9.05)	8.90 (8.22-9.61)	9.24 (8.54-9.98)

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

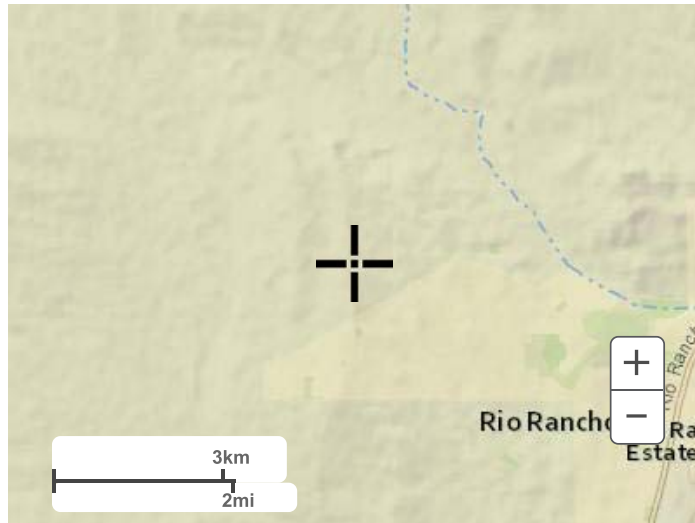
PDS-based depth-duration-frequency (DDF) curves
 Latitude: 35.2633°, Longitude: -106.7206°



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Maps & aerials

Small scale terrain



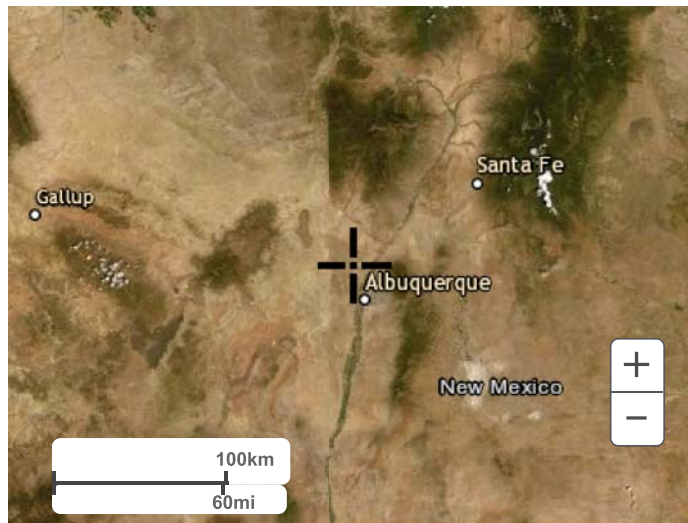
Large scale terrain



Large scale map



Large scale aerial



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Southern Sandoval County Arroyo Flood Control Authority

Design Rainfall

Project Name: Los Diamantes Regional Pond

Prepared By: CRH

Watershed: Calabacillas

Date: 1-Aug-19

Input Data

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

Storm Event	Point Rainfall Depth³ inches	Depth-Area Reduction Factor	Adjusted Rainfall Depth⁴ inches
10-Year, 1-Hour	1.130	1.000	1.130
10-Year, 6-Hour	1.510	1.000	1.510
10-Year, 24-Hour	1.890	1.000	1.890

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 Depth³ inches	Depth-Area Reduction Factor	Adjusted Rainfall Depth⁴ inches
100-Year, 1-Hour	1.800	1.000	1.800
100-Year, 6-Hour	2.330	1.000	2.330
100-Year, 24-Hour	2.800	1.000	2.800

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

Storm Event	Point Rainfall Depth³ inches	Depth-Area Reduction Factor	Adjusted Rainfall Depth⁴ inches
100-Year, 1-Hour	1.800	0.765	1.377
100-Year, 6-Hour	2.330	0.910	2.120
100-Year, 24-Hour	2.800	0.944	2.643

Notes:

1. Recurrence interval must be one of the following: 1, 2, 5, 10, 25, 50, 100 or 500 years
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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: 500 years
Storm Duration²: 24 hours
Watershed Area: 1 sq. miles

Storm Event	Point Rainfall Depth³ inches	Depth-Area Reduction Factor	Adjusted Rainfall Depth⁴ inches
500-Year, 1-Hour	2.330	1.000	2.330
500-Year, 6-Hour	2.960	1.000	2.960
500-Year, 24-Hour	3.480	1.000	3.480

Notes:

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