# 10697 Old Briceland Farm Rainwater Catchment Analysis Addendum

#### Catchment Surface Area

Greenhouses – 7,200 SF Propagation Building – 1,800 SF Generator Shed – 2,700 SF Hillside – 13,200 SF Pond - 10,600 SF TOTAL = 35,500 Square Feet

Water is plumbed to the pond from structures through gutters and French drains.

### Rainfall Data Summary

Rainfall data is obtained from: <a href="https://prism.oregonstate.edu/explorer/">https://prism.oregonstate.edu/explorer/</a>

Evaluation of rainfall data between 1971 and 2022 was used to determine average rainfall. The lowest five rainfall years between that period was used to determine low rainfall average.

Average rainfall: 64.25 inches Low rainfall average: 31.63 inches

### **Catchment Potential**

(Average) 35,500 SF x 64.25 x .62337 = 1,421,829 gallons (Low) 35,500 SF x 31.63 x .62337 = 699,960 gallons

In a low rainfall year, up to 62% of the annual water budget can potentially be provided by rainfall.

# Rainfall Data

Kainfall L	<u>vata</u>		
	ppt		
Date	(inches)		١
1971	59.89		-
1972	60.74		
1973	91.11		
1974	67.8		ı
1975	72.36		ı
1976	29.37	29.37	ı
1977	49.87		(
1978	57.69		-
1979	65.89		
1980	57.27		
1981	77.96		
1982	86.47		
1983	120.91		
1984	58.38		
1985	35.65	35.65	
1986	75.84		
1987	63.3		
1988	48.62		
1989	45.05		
1990	44.09		
1991	36.8	36.8	
1992	61.22		
1993	66.44		
1994	46.57		
1995	99.92		
1996	93.12		
1997	63.1		
1998	98.66		
1999	63.31		
2000	54.65		
2001	60.62		
2002	70.14		
2003	69.11		
2004	55.26		
2005	82.79		
2006	75.8		
2007	46.35		
2008	50.36		

PRISM Time Series Data

Location: Lat: 40.1076 Lon: -123.8947 Elev:

932ft

Climate variable: ppt Spatial resolution: 4km Period: 1971 - 2022 Dataset: AN81m

PRISM day definition: 24 hours ending at 1200 UTC on the day shown

Grid Cell Interpolation: Off

Time series generated: 2023-Aug-07

2009	52.27					
2010	89.09					
2011	58.51					
2012	90.22					
2013	21.98	21.98				
2014	66.79					
2015	47.75					
2016	95.18					
2017	85.31					
2018	55.78					
2019	81.67					
2020	34.36	34.36		158.16	31.632	5 year low rainfall average
2021	57.87					
2022	41.5		3340.76	64.24538	52 year	average