The Homestead 2024 Resort Master Plan Additional Water Right Calculations

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Project Information

Tables 1-3 provide the water right requirements and additional water uses for new The Homestead Resort Master Plan.

Resolution 2008-09 A Master Plan Development Agreement for The Homestead Resort states in Section 3.1(b)(4) - Water "On May 5, 2008 the Midway Advisory Board determined that the Developer owns or leases enough water to provide an additional 107 acre-feet of water which is necessary to serve the improvements (including the golf course) identified on the project."

Existing uses at The Homestead that will be replaced with similar facilities are not considered in the analysis. New or expanded uses must dedicate additional water rights. These new or expanded uses are calulated below. Credits for existing uses that will be removed are also shown. Existing uses that will be replaced within the resort include the golf clubhouse, restaurants, conference rooms, house keeping and existing restrooms.

The water right calculations below are based on the amended master plan dated February 27, 2024.

There were 12.90 acres of irrigated area within the existing Homestead resort core prior to the 2020 improvements.

The new master plan will irrigated an additional 2.40 acres.

The existing site has 0.72 acres of ponds.

The new master plan contains a new 0.11 acre pond near the wedding barn

These numbers should be verified once the final landscape plans are completed.

Response to May 6, 2024 Water Board Questions

Homestead currently has 15 weddings a year.

Homestead has 130 conference events in the 5 existing conference spaces.

50 events with a meal per year (weddings or conferences) are expected in the new Event Barn.

20 events without a meal per year are expected in the new Event Barn

Only the new uses are accounted for in the water calculations below.

See Restaurants - d. per customer served (includes toilet and kitchen wastes) from Table 2, Utah Code R309-107 for events with meals Visitor Center assumed for conferences with meals from Table 2, Utah Code R309-107.

Table 1 - Water Use Requirements

	Water Requirement			Return Flow Total Required		Required
Use	Quantity	Unit	Source of Requirement	Requirement	Quantity	Unit
Irrigated / landscaped area	3.00	acre-feet/acre	Midway Water Board	0.00	3.00	acre-feet/acre
Hotel resort unit	150	gpd/unit	Table 1, Utah Code R309-510	1.77	0.30	acre-feet/unit
Restaurant	35	gpd/seat	Table 2, Utah Code R309-510	1.77	0.07	acre-feet/seat
Swimming pools	10	gpd/person	Table 2, Utah Code R309-510	1.77	0.02	acre-feet/person
Retail and commercial	500	gpd/toilet	Table 2, Utah Code R309-510	1.77	0.99	acre-feet/toilet
Weddings & conferences with a meal (50 per year)	10	gpd/seat	Table 2, Utah Code R309-510	1.77	0.002	acre-feet/seat
Conferences without a meal (25 per year)	5	gpd/person	Table 2, Utah Code R309-510	1.77	0.0004	acre-feet/person
Spa and activity center	25	gpd/person	Table 2, Utah Code R309-510	1.77	0.05	acre-feet/person

Table 2 - Change in Water Uses at The Homestead

Table 2 Change in Water Cool at the Hemotic			
Use	Quantity	Unit	
Existing units to be removed	-12	units	
Irrigated area added to resort	2.40	acres	
Pond area added to resort	0.11	acres	
Residential homes	7	homes	
New guest condo units	68	units	
Additional restaurants seating	130	seats	
Additional restaurant (Milk House)	35	seats	
Additional swimming pool capacity	206	person	
Retail and commercial	2	toilet	
Weddings and conferences with a meal	300	person	
Conferences without a meal	300	person	
Spa	50	person	
Activity Center	40	person	

Comments

Only 12 existing units to be removed, 125 of the existing 137 units will remain. less than previous plan (4.61 acres) due to additional parking and buildings

Previous master plan had 0.07 acres

Previous master plan had 5 homes

3 - 6 unit building, 5 - 10 unit building (Previously 49 units).

See note 4.

Based on occupancy calculations on building permit plans.

See note 1.

Additional mens and womens toilet stalls in commercial and amenity areas

Table 3 - Additional Water Needs for The Homestead Resort

	Project		Water Requirement		Total
Use	Quantity	Unit	with Return Flow	Unit	(acre-feet)
Credit for removed hotel units	12	units	-0.30	acre-feet/unit	-3.60
Irrigated area added to resort	2.40	acres	3.00	acre-feet/acre	7.20
Pond area added to resort	0.11	acres	3.00	acre-feet/acre	0.33
Residential homes	7	homes	0.80	acre-feet/home	5.60
New guest condo units	68	units	0.80	acre-feet/unit	54.40
New restaurant spaces	130	seats	0.07	acre-feet/person	9.10
Additional restaurant (Milk House)	35	seats	0.07	acre-feet/person	2.45
Swimming Pools	206	person	0.02	acre-feet/person	4.12
Retail and commercial	2	toilet	0.99	acre-feet/toilet	1.98
Weddings and conferences with meal (50 per year)	300	person	0.002	acre-feet/person	0.60
Conferences without a meal (25 per year)	300	person	0.0004	acre-feet/person	0.12
Spa	50	person	0.05	acre-feet/person	2.50
Activity Center	40	person	0.05	acre-feet/person	2.00

Notes:

- 1. The existing swimming pools, hot tub and fitness center has an existing capacity of 194 people. The new swimming pools have a proposed capacity of 400 people for a net difference of 206.
- 2. 1 acre-feet per year = 892 gallons per day
- 3. The Midway Water Board policy was recently changed from 1.0 acre-feet per home to 0.80 acre-feet per home. This change represents a 1.77x return flow. The previous policy was 2x.
- 4. The existing restaurants have a 172 seating capacity (Simons 96 and Fanny's 76). The new restaurants, bars and lounges have a capacity of 302 for an increase in restaurant capacity of 130 seats.
- 5. Per the building permit application the Milk House food and beverage outlet has a occupancy of 35 people.