

Willard City
Proposed Water Rights Requirement Changes
Water Rights Worksheet
December 5, 2024

Approximate developable acres in city boundary	1811.2 acres		
Total Current Water Rights (volume)	3963 ac*ft		
Water Rights Needed for Existing Users	741.11 ac*ft		
Current Excess Water Rights	3221.89 ac*ft	3938 ERC's	(0.818 ac*ft/ERC)

Water Rights Previously Committed or Set Aside

Water Connections Already Committed

Granite and Wells property	114.52 ac*ft	140 ERC's
Deer Run	148.06 ac*ft	181 ERC's
Granite Ridge Subdivision	58.08 ac*ft	71 ERC's
Non-committed water	2901.23 ac*ft	3546 ERC's

Set aside for future

Buffer	290.12 ac*ft	354.7 ERC's	10% of non-committed water
Commercial	435.19 ac*ft	532.0 ERC's	15% of non-committed water
Parks and institutional use	333.00 ac*ft	407.1 ERC's	see notes below

Excess Water Rights after reservations	1842.93 ac*ft	2253 ERC's
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Excess Water rights per developable acre	1.018 ac*ft / acre
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Parks

- The NPRA (National Recreation and Parks Assoc.) recommends 10.6 acres of parks per 1,000 residents.
- 1,811 acres developable at 1/2 acre per ERU density = 3,622 new homes x 3.2 people per house = 11,590 new residents at build out.
 - 11,590 future residents + 2,283 current residents = 13,873 total future population
 - 13.873 x 10.6 = 147 acres of parks needed
 - 147 acres - 36 acres existing = 111 acres future parks/open space
 - 111 acres * 3 acre*ft/acre for lawn = 333 acre*ft

Commercial

- A theoretical food producing facility using 160,000 gallons of water per day equals 219 ERC's
- Flying J was recently 39 ERC's

I have found the following ERC's equivalents in other areas

- Restaurant 1.8 ERC's / 1000 sf
- Fast food restaurant 2.375 ERC's / 1000 sf
- School 0.043 ERC's / student