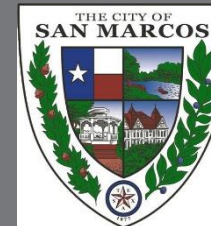




Incidental Take Forecast

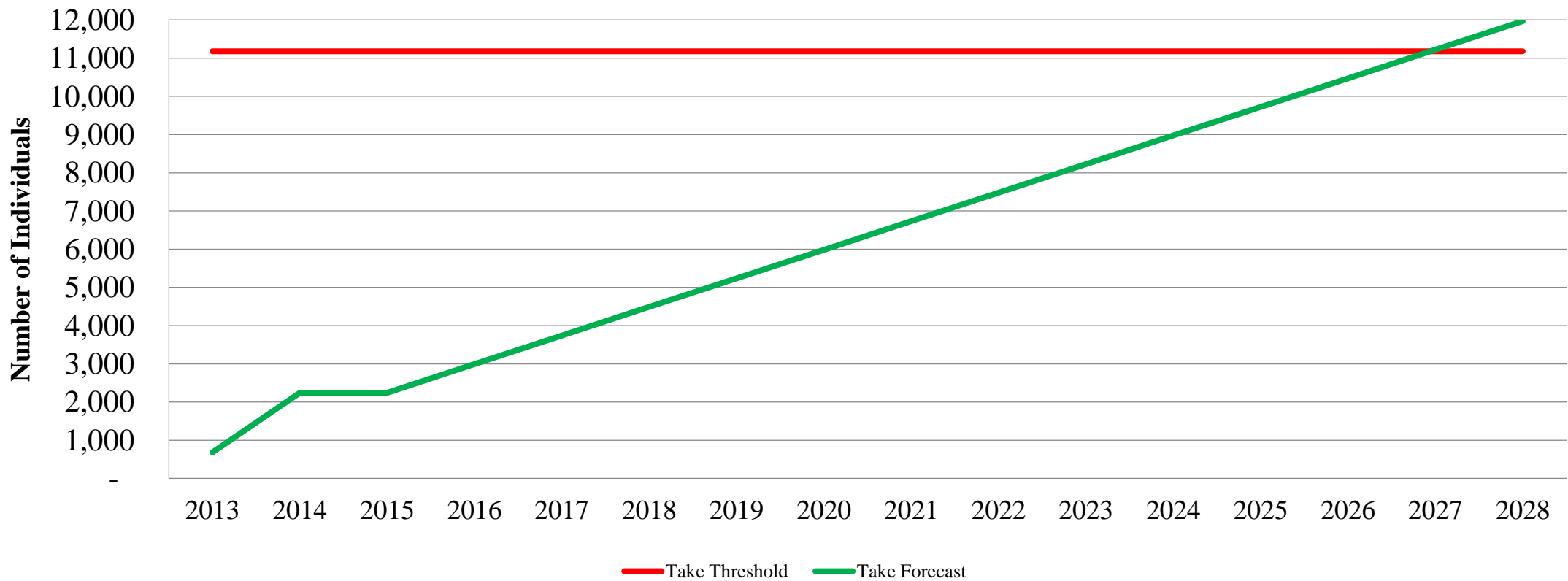




The official definition of take includes the attempt or action to *“harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect”* threatened and endangered species.

Take may occur incidentally; meaning that take is *“incidental to, and not the purpose of, the carrying out of an otherwise lawful activity.”*

Comal Springs Riffle Beetle Incidental Take Forecast
2013-2015 actuals, finish with Take Average (748 per year) to End of Permit
(reach limit in 12 yrs)





San Marcos fountain darter incidental take (IT) scenarios were established by:

Normal yearly average: 12,391 fountain darters (FD) taken in the San Marcos system (USFWS).

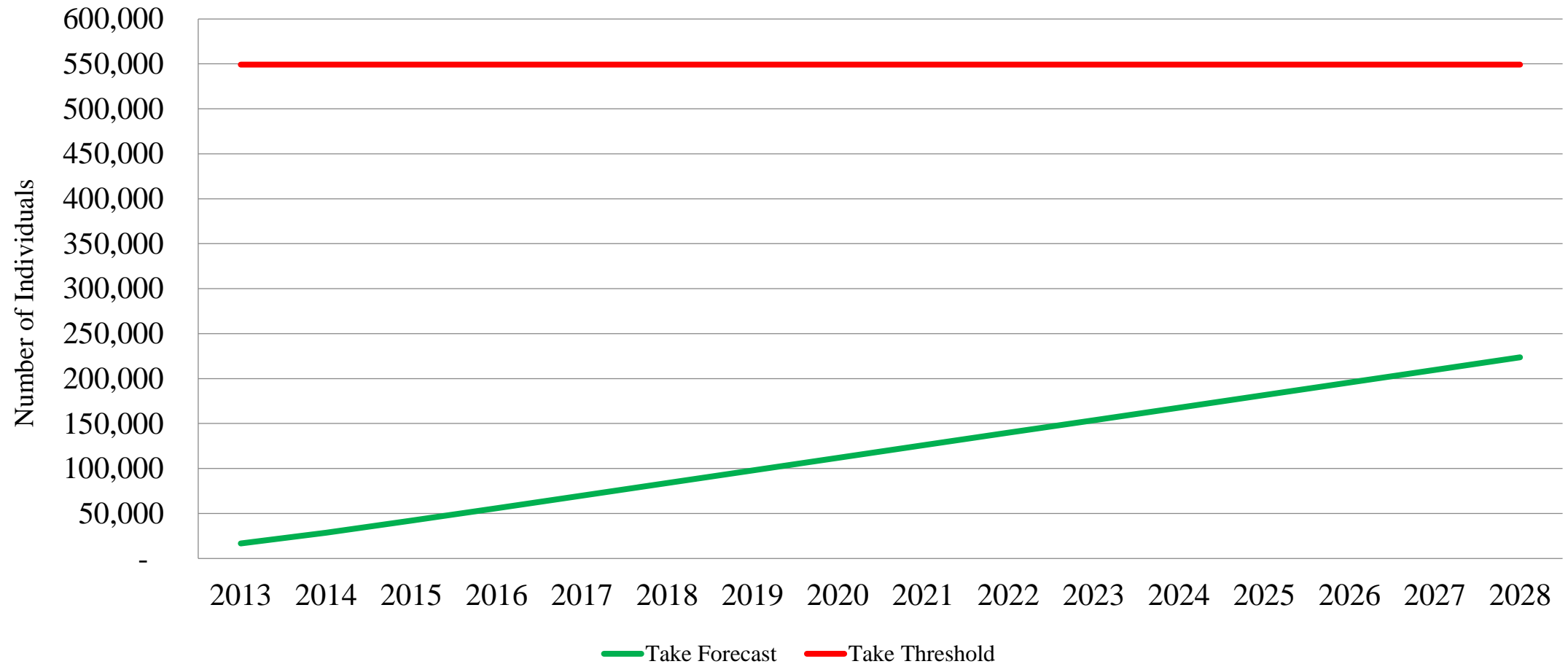
$$12,391 * 8\text{-years} = 99,129$$

Drought of Record (DOR) yearly average: 64,286 FD taken in the San Marcos system (USFWS).

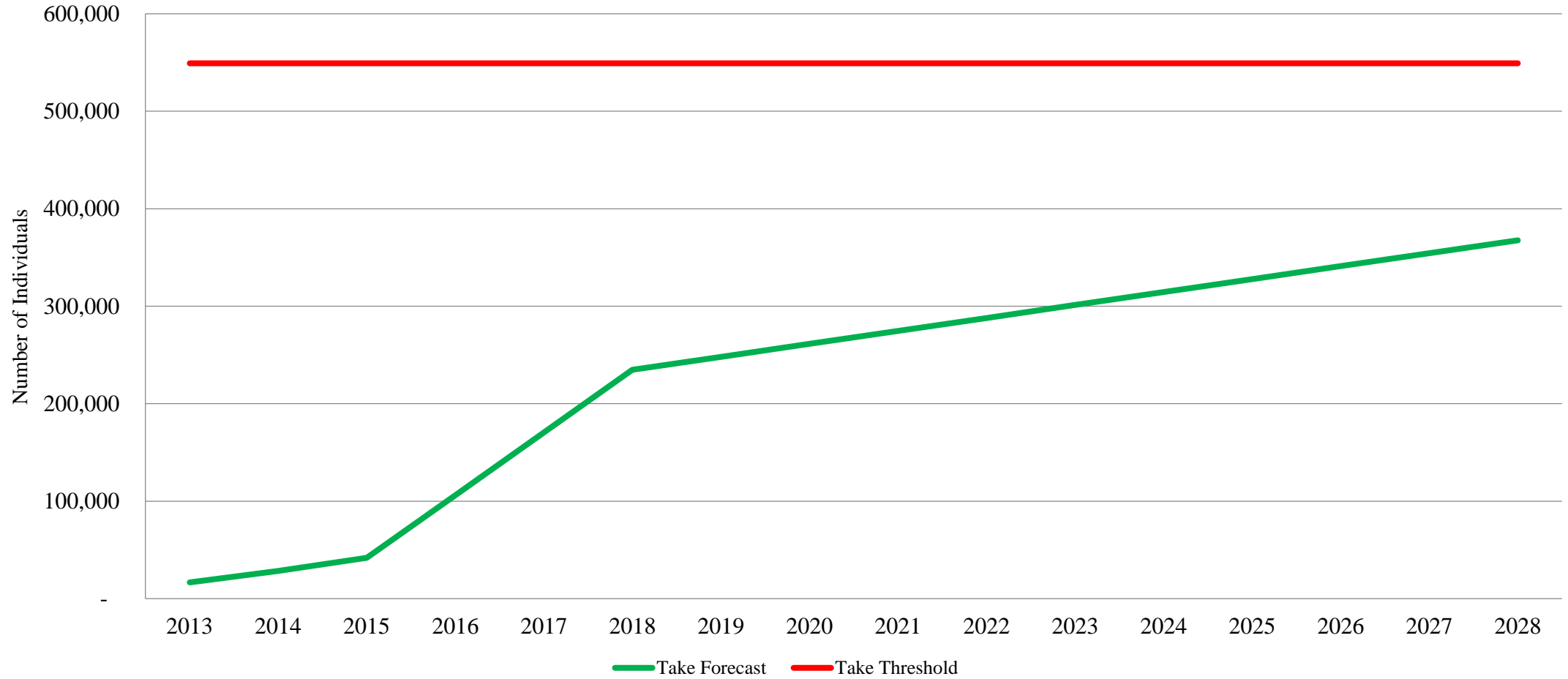
$$64,286 * 7\text{-years (remaining)} = 450,000$$

$$99,129 + 450,000 = \underline{549,129 \text{ FD take threshold in San Marcos System}}$$

San Marcos Springs Scenario 1: FD Incidental Take Forecast 2013-2015 actuals, then Take Average (13,972 per year) to End of Permit



San Marcos Springs Scenario 2: FD Incidental Take Forecast
2013-2015 actuals, 3-Years of DOR (64,289 per year),
then Take Average (13,972 per year) to End of Permit



San Marcos Springs Scenario 3: FD Incidental Take Forecast
2013-2015 actuals, DOR for 7 years (64,286 per year),
then Take Average (13,972 per year) to End of Permit (reach limit in 12 yrs)

