

WHERE ARE THE FROGS !!

Draft 03/12/2013 by Roger Castillo

Data and research collected Starting of observation spring year of 2002. Recon investigation and photo collections years of 2008 to 2013.

Growing up in the city of San Jose as child observing the streams with friends throughout the years from 1960s to 1980s. I remember on the Guadalupe River we would rescue fish and animals within dry backs the streams. We would encounter numerous other animals likes common golfer snakes and fencing lizards, alligator lizards, evasive bullfrogs, California toads, and Pacific tree frogs., In the midst of a drought in 1970s drying banks of the Guadalupe River we would rescue and hold them at home and study them. The banks of the Guadalupe River would be moving and teeming with life. As young California toad and Pacific Tree frog would make the banks come alive as tens of thousands would try to escape our little grasping hands. You could find the frogs in backyard several blocks away from the river feeding and keeping the insects in check around your garden.

Following and monitoring Guadalupe short river running Chinook salmon behavior or research in the 1980s to present within streams of San Jose. I had discovered that not only are the salmon have been disappearing from the river. But Pacific Lamprey, Frogs or amphibians are suffering the same fate. While certain categories of mammals or birds are flourishing. Other animals are not. Some are almost nonexistent on the Guadalupe River System and on Coyote system or other streams. Tributaries of Coyote Creek, Silver Cr, Thompson Cr. Frog can only be found successfully breeding and reproducing within certain microhabitat. These isolated microhabitat ill straight some of the problems created with (SCVWD) stream maintenance program measures. Periodic maintenance meaning pesticide spraying, working large equipment to maintain road , and driving their vehicles within the stream. In this investigation I discovered that the only areas that you could find reproducing amphibians is out of scope of Stream maintenance program. Areas outside of they're practices we found thousand of Pacific tree frogs and some California Toads populations successfully reproducing.

The (SCVWD) refuses disclose how much or how often they spray.

I

I discovered the biggest factor from the declined on frog population or amphibians on two streams. Canoes and Thomson Creek results from flash runoff discharge from street to storm drains from develop areas in the vicinity of these two Creeks wash or carried away eggs, tadpoles and inhabitants with each passing rainstorm. Combination of late storms carrying away tadpoles and eggs to lower reaches of the Thompson Creek area in the vicinity of Quimby Road to Tully road. With each passing storm documented end result of tadpoles and frogs perishing within these confined areas in few days. (SCVWD) maintains the stream and banks with large amount pesticides or herbicide. Failed to disclose how much they have a applied throughout they year to each individual stream. Compounding affects periodical stream dredging or in stream channel maintenance during the nest season or tadpole development. And the destruction of habitat has brought the frog population too critical and dangerous low levels. The Santa Clara Valley Water District (SCVWD) has adopted this pesticide management in the mid 1990s. The pesticide tanker truck can be found spraying thousands of gallons a year along our streams during the summer. Early part of spring tractors mowing down the banks of levees while frogs are trying to make journey to the stream to reproduce. Giant tractor weed wakers clear all woody Debra or grasses. Transitioning levees or banks to dust bowls during the in migration of frog to streams.

Adult frogs like Pacific tree frogs and California toads return to the streams to reproduce in the spring to early summer. They deposit their eggs in shallows along the stream banks. Pacific Tree frog and California Toads anchors their eggs around the surrounding under water vegetation, floating vegetation woody debris or stones along the creeks corridor. Once emerging from their eggs they immediately become ferocious algae feeders and eating small organisms within the Creek they can be caught digging tunnels through the algae as they feed. As tadpoles they needs shallow clean water to pond in while they metamorphosis into frogs. Once they turn into frogs they must rear along the stream in gardens and sometimes in your own backyard. The ground dwelling California Toad is more acceptable to the facts explained, as they cannot escape the spraying or the effects of vehicles stomping on them. California toad cannot be found on any streams with in city San Jose any more. Reptiles or amphibians are rarely seen or found along our stream.

For more information on how you can help log on Salmon and Steelhead Restoration Group (SSRG) at <u>www.silichip.org</u>

Exacerbating the accelerating on extinction of amphibians and reptiles is that all cities are now adopting these method and not regulating the amount of pesticide use within households or private areas, Golf courses, landscapers and private homeowners. Estimates are 99% of all lawns and gardens these chemicals are being used to quickly eradicate plants as a quick short and long-term solution. Long-term effects on soils and accumulated residue from sidewalks and roadways are heavily discharging to streams during rain storms.

Microhabitat A sanctuary for Pacific Tree Frog Frog came out of hiding within a tire.

Two to three egg laying cycles are seried away with each small storm

By Roger Castillo April 22,2012

rious problems are thriving on within a

By Roger Castillo April 22,2012

By Roger Castillo April 22,2012

oank's 8 to 10 teet in nd yet the population ssing storm frogs return clusters of eggs 3 to 4 eriod. Pacific tree frogs lient climbers and can

By Roger Castillo April 22,2012





When animals are forced from one area to another, factors storms or changing weather pattern or introduce project. These conditions could normally promote recolonization in areas downstream. So why are we not finding these animals in lower watershed?

Microhabitat 500 yards in length tens of thousands of Pacific Tree frogs. Hundreds of thousand of eggs in one season. So what the big secret? and what animals are missing. Clear clean water, gravel or pebbles, native plants, cover such woody debris in and out of water, undercuts, crevices, overhanging structures, food source and moderately safe accessibility.



Each passing storm sends the next generation downstream to oblivion.



By Roger Castillo July 27, 2013 One species of amphibians flourishing within one section of a microhabitat A good year for Pacific tree frogs. Frog egg lay cycle can last up to three months and luckily no surprise storms thru late spring or summer of 2013.





2013 turns out to be a good year for frog populations within the microhabitat.





2013 did not present late spring or summer storms so Pacific tree frogs are in high numbers. Other amphibians are not.



By Roger Castillo photo date

By Roger Castillo photo date 10/18/2008

Photos 10/18/2008 downstream of Quimby Road bridge to Tully Rd Affects from dredging, clear cutting all banks. Leaving stream unstable for threaten or endangered species or common animals. All measures should be taken to reduce the effects of any impacts

and yet what is happening here?

Operating a stream to exterminate endangered and native species is not acceptable. I have observed this area within a 20 year period. Dredged six times within 12 year period. 2003 thru 2012.

Conditions left to accommodate evasive species. Pools left 4 feet deep with mud and soil only. Infestation of Louisiana Swap crayfish currently exist within the entire area 07/024/2013. An animal that can consume any living organism.

By Roger Castillo photo date 10/18/2008

By Roger Castillo June 30, 2013

Levees clear-cut mid spring by heave machinery mower 6 mile stream. I Soon after dredge excavated commence. Quimby Road to Tully Rd June 30, 2012 Quimby Creek confluence to Thompson Creek. Dredging or clearing all vegetation within the east, banks and levees with heavy equipment June 30, 2012.

By Roger Castillo June 30, 2013

2012 dredged to 6 feet of the main channel. Quimby Cr thru Tully Rd

Leaving less than 36 inches to the water is not acceptable. So what can we do better here?

By Roger Castillo July 24, 2013

By Roger Castillo July 24, 2013

Type to enter text TSanta Clara Valley Water District detrimental practices. Region Aborn Rd. to Tully Rd. from tributaries of Thomson Cr and Quimby Creek 4 miles of watershed accumulative effects.

By Roger Castillo July 24, 2013

So what can we do better here?

So what can we do better here?

By Roger Castillo July 24, 2013



© 2013 G

21°48'31.88

Fastitle

9/11/2012 20 1998

Further north on Thompson Creek split channel both channels managed as deepwater sediment traps. Sacrificing the hole stream in acceptable. Splitting channel one of two. One must remain as shallow refuge.

ry Date: 9/11/2012 🕗 1998

oman Wa

alen-Hardy

Google earth

921 f

116.

By Roger Castillo May 12, 2012

Blue algae is I lethal to animals and this looks very close to those conditions.

By Roger Castillo May 12, 2012

Very small population of tadpoles discovered within 6 mile of stream. Quimby Cr to White rd to confluence north and South Thompson Creek.

Roger Castillo May 12, 2012





So where's the water coming from? Pump-station pumps water from foundation nearby send water by storm drain to the creek and has been sustaining this section of Creek for decades.





Studying development from rescued eggs, to metamorphosis from tadpoles to frogs. Returning survivors to the designated areas where the eggs were rescued from.

While Pacific Tree frogs are thriving within this microhabitat many of the ground dwelling amphibians are no where to be found. Factors of other amphibians not able to climb excessive vertical banks. Access to the creek for ground dwelling amphibians is a 8 to 10 foot plunge off a cliff in most areas. The most heartiest of amphibians which is the California Toad has not been seen or found within this area last 12 years. As a child California Toads could found in every section of stream. They where like ants jumping away on the banks.

Learning critical factors before doing projects. Small rain storms 1/16 to 1/8 of inch sends all of its inhabitants downstream were all amphibians and other animals perish.



Santa Clara Valley Water District Bank stabilization projects that are working to reduce the effects of flash runoff discharge from storm drains. Level of performance monitored 12 years. Grade A performance.



So what can be done here before big storms arrive? Thinking out the box alleviating the effects.

Money spent to maintain 6 miles of watershed with continuous dredging, herbicide spraying clear-cutting all banks and dual road repairs. These vertical bank could've been completed two times over with money spent down stream. Allowing areas to a degrade so more rigorous work must be done in other areas is not acceptable.

What are the factors here? I rescued many tadpoles from the drying pools within this area as the water soaks into the sandy and muddy channel within hours.

With each passing small storm banks cave-in and soil sent downstream. Animal sent within these areas cannot escape or climb out drying stream and are trap in peril. Surviving the 6 foot plug first of two drop structure barriers at Quimby Road bridge southend. Oct.18 2010

> Every small storm affects downstream reaches creating a costly and detrimental practice.

What happens when two streams meet together Thomson and Quimby Creek. Please note water quality created.

Oct 18th 2008. All ground dwelling amphibians and other animals meet their demise at the hand of Santa Clara Valley Water District operations.

Surviving the second of two plunges northend. This drop structure is 8 foot heigh. So what get sent down stream with each small storm.





Pacific Tree frog symphony mating call. The song of "Love In San Jose"

Where amphibian up and how long do they survive. With no cover small pocket of gravel could only be found at confluence. All amphibians were forced to remain here and we're prayed upon by birds or predators. Return to site the following week no signs of amphibians within this whole entire stretch of stream. Over four dozen Canadian geese observed within the area it appears that they slaughtered all's amphibians in tadpole and egg stage within the area. Santa Clara Valley Water District Bank stabilization project and its effects. Learning the math before doing a project is first criteria.

> Recent projects are affected by each passing small rain event.

Alleviating the effects from developed areas from sending flash discharge to the minimum should be the first criteria before bank stabilization projects are introduced.







City of San Jose on Conoes creek a concrete channel with marginal influences for sustaining some native frogs. 2012

Water can flow much cleaner over concrete but affects of thermal heating, smallest of storms present critical factors. Especially with climate change and unexpected storms that are now occuring.

Factors for the California toad. Adults and juveniles are able to escape the flashing high flows.They' re able to crawl out of these concrete trapezoid channels. But the eggs and tadpoles get swept away with each passing storm. Rolled up like a carpet. Plant can not anchor their root to concrete.

Aquatic plants rolled up like a carpet 2 mile no eggs or tadpoles found in the entire stretch of stream. Only first early brood of frogs found.

August 26, 2013 dredge comment and increase to every year. A moderate drought as of year of 2006.