# the Bow Inlet

The historical biblical book of Exodus has recorded details that can differentiate true theories describing the real circumstances from attractive but false speculations.

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**1. Route:** *Ex* 13:17-18 "God <u>led them not</u> by way of the Land of the Philistines, although that was near, but God *led the people about by* way of the wilderness of the Red Sea." At the first stop, Succoth, Israel was near the way to the Land of Philistines but turned to the Red Sea. Pg 18

**2. Campsite:** Exodus 14:2 "turn and encamp 14:21 "And Moses before Pihahiroth, (mouth of the canal)"



Num. 33:7 "from Etham turned again toward PiHahiroth

Suez Sea

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3. East Wind: Exodus stretched out his hand over the sea: and the LORD caused the sea to go [back] by a strong east wind all that night, and made the sea dry [land], and the waters were divided." The LORD parted the sea by an east wind all night. Pgs 3, 4, 5, 6, 9, 10, 19, 22

**4. Sea parted:** Exodus 15:8 "with the blast of thy nostrils the waters were gathered together, the floods stood upright as an heap, the depths were congealed in the heart of the sea." Nostrils or nose suggests there were at least two channels of wind on both sides, right and left. Pages 4, 5, 6, 8, 10, 22, 24

5. A WALL of waters right & left: Ex 14:22 "And the children of Israel went into the midst of the sea upon the dry [ground]: and the waters [were] a wall unto them on their right hand, and on their agree with this text fully. Pages 10 - 23, 33

6. Moses Song: "Thou stretched out thy right hand, the earth swallowed them." Exodus. 15:12 states, and evidence agrees, that a sand river bank collapsed and buried the Egyptian army at left." Theories need to the Red Sea's closing. Promising site survey evidence has been found. Pgs 3, 4, 5-36

7. An archaeological site identified herein is expected to confirm the Exodus sea parting and return location with chariots, armor, horses, soldiers, and Baalzephon remnants.

### Testing the theories

The events of the biblical Exodus capture people's imaginations to know just what happened. Major events like the sea parting and route details inspire conflicting theories while casting doubt on the reliability of the Bible and God. But the minor events tell a much more complete story and test which theories really match the text. Learning the truth opens new and deeper understandings of scripture and greater faith in the true person of God.



Theories A - N at Mediterranean Sea; and Lakes: Sirbonis/Bardawil, Manzala/Tanis, Ballah, Timsah, Bitter; and Gulf of Suez, Gulf of Agaba

### **Analysis Overview:**

Although this is but a brief analysis of the Exodus Route and Red Sea Crossing theories it is enough to show the conflicts between bad theories and credible but lesser known Bible passages. Examining the sea parting places and methods provides an understanding and confidence to finally know what really occurred as God, via Moses, parted the Red Sea.

Would God supply many fine details of the first few days travel and Red Sea crossing (referenced herein) if it all happened by an unexplainable miracle that disagrees with those details?

parted by a low tide or earthquake

generated tsunami. The land strips

parting mechanisms are not effective enough to accommodate the

great masses of people and herds in

Pihahiroth locations are speculative

are not wide enough and sea

the time allowed. Migdol, and

### To know the ways of God and the truth of his existence

### EXODUS SEA PARTING THEORIES

*The importance of understanding* the Red Sea parting is that it starts to open the connection between the plagues of Exodus and the coming plagues in the book of Revelations.

Nature, science, and God, are in harmony. Faith and reason, spirit and truth, are in agreement, not in conflict.

All scripture from God is useful, uplifting the unlearned to seek knowledge of the Holy. Seek, Find! Study to be approved. Be thoroughly furnished for good works. Reject empty words and false science arguments contrary to truth. Avoid vain imaginations but pursue knowledge and understanding. Give reason for hope with the truth of God believing the wonders of God, but not imagining thoughtless unexplainable mysterious simplifications. Does not even nature glorify God to teach us that we may learn the ways and ordinances of God to benefit ourselves, our fellow men, and bless and glorify God?

*After the Exodus the Red Sea geo*graphy changed and the oldest maps are gone, so we must estimate the past geography and conditions from historical evidence. The best theory imagines the least, verifies scripture the best, harmonizes with God and nature, and affirms logic and truth.

A. Lake Sirbonis (Bardawil) -A strip of sand in the south eastern corner of the Mediterranean Sea is the crossing point of several theories.(1) Sea parting by a very low tide or a tsunami from ca. 1447 BC Thera

volcano (above Crete) are not an east wind.(Exo. 14:21) An EAST wind will not work and it is not the Red Sea. With the Mediterranean on one side and a fresh water lake on the other it is not a parting of the Red Sea, and it is by "the way of the land of the Philistines" contrary to scripture. (Exodus 13:17)

and forced. Good points are: ample fresh lake water for people and herds, and Thera Volcano timing. Scripture also disagrees with water SEA 34° Jerusalem, O MEDITERRANEAN Gaza Strip Dead Sea Port Said El Mansoura Beersheba Rabba Goshen? ISRAEL NEGEV JORDAN Bitter Lakes 30° SINAI Birket Qarun PENINSULA Gulf EGYP1 Mount Catherine 2642m SAUDI OTabuk ARABIA S Al-Qusair

B. Lake Manzala (Tanis) Near Port Said, now north Suez Canal, seven King James Bible verses mention the nearby city **Tahpanhes** or Daphne (Greek transliteration). Objections similar to A above but an east wind could dry a patch of shore similar to the Bible text, according to Carl Drews' computer simulations. Drews & Han (2,3). Wind Set Down, or wind blowing water

down and away from a shoreline, would partially work, but the area locations violate details in scripture as analyzed by ABR, Associates for Biblical Research (4). Also, Drews' wind details conflict with scripture in direction and strength. The Beaufort Scale (5) indicates that wind strong enough to cause a high wall of water would be impossible to walk against.

Ex. 14:22 "went into sea on dry ground and the water was a wall on the right and left." Notice the wind blown wall of waters was there at the very same time the Israelites were walking through it - not later. Computer simulations of water parting either have wind too strong (62 mph, Beaufort Force 10) to walk into or too weak to make A WALL at the same time. Walking into a wind becomes fairly difficult at Beaufort Force 8 about 45 mph. Also objections same as **A**. above. R. Larry Overstreet (6) "If one accepts the inerrancy of the Bible, locating Israel's crossing of the Red Sea in Exodus 14D15 any place other than the northwestern arm of the Red Sea (i.e., the Gulf of Suez) is practically impossible." From the Bible and many nonbiblical sources Overstreet opposes Red Sea crossing places based on Yam Suph meaning Reed Sea while strongly favoring the Upper Gulf of Suez as the only location agreeing with scripture. This then argues against crossing at any Mediterranean or northern lakes site and against any southern Sinai or Gulf of Agaba site. See also Notes Page 7.

C. Ballah Lakes and Lake Timsah: These candidate lo-cations depend on imaginative and speculative locations for campsite names Migdol, etc. Also, again the meaning of Yam Suph is doubtful. The water parted by wind would not have made A WALL, or, if making A HIGH WALL the retreating storm surge would have also piled the people into heaps. For more about Wind Set Down calculations see also, Brunt, Meteorologist's View:

http://ed5015.tripod.com/BRedSeaCrossing.htm

**D. Great Bitter Lake:** Same problem here. Water parting mechanism. wind set-down either is too weak to create A HIGH WALL of water or it will be too strong and blow the people into a pile. This is a fatal flaw of most proposals. "Wind Set-Down" is the term for the action of wind from a beach pushing the water up and away from that shore, and "Relaxation of Wind Set-Down" is the surge of the water returning. Reference:

http://earth.huji.ac.il/data/pics/wind\_set-down(jcp).pdf

**E. Little Bitter Lake:** Timing and route turns fit scripture but Bible place names have no geographic connection. Wind strong enough to make a wall of water on the right and left would still blow away the people.

- F. Bow Inlet Little Bitter Lake to Bay of Suez: Since 1869 the Lower Suez Canal has connected the south end of Little Bitter Lake to the Gulf of Suez. Previously it was sand and before that historians write of the Heroopolite Gulf and there is evidence of canals. At the Exodus, about 1447 B.C., evidence indicates an arc of water, herein called the Bow Inlet, existed at this location and appears to meet all the Exodus Red Sea parting biblical details. See Page 11 and following. Not only are ancient canals found in the lower Suez Canal area of old maps but modern maps also show evidence of this very same Exodus Red Sea opening, crossing, and closing. Archaeological digs should uncover the army and confirm that the Bow Inlet area was the Exodus Red Sea Crossing site. People and cattle had plenty of fresh water at the Bow Inlet until after the Red Sea crossing due to the Locust Plague discussed in the Bow Inlet write up. Bible place names are well indicated. A sandy ridge on the eastern shore fits Baalzephon the Egyptian 'Baal-Capuna' the site of pagan worship and Migdol fits as the large mountain Jebel Atiqa. Pihahiroth means 'mouth of the canal' with exactly matching digs shown on old maps at Gulf of Suez. Nostrils are Mitla and Giddi Passes. Bow Inlets north and south match mountain passes that are north and south exactly east. An east wind is naturally strong at the sides causing A HIGH WALL of water on both sides. Wind is blocked in the middle by a mountain, thus shielding the travelers in the middle and not piling them up into heaps. Fifty+ parameters of geography are perfectly crafted to part the Red Sea and bury the army. "the earth swallowed them" Exodus 15:12. Now what is the chance of that? Meteorological and geomorphology software now has an ideal geography to test a Red Sea parting simulation. Many crossing theories J - M in this list cross the Bow Inlet as a route but assume it is just sand as was the case from about 1447 BC to 1869 AD.
- **G.** Nile River at Giza: Matheny (7) claims Goshen was West of Nile Delta and Route went initially west of Nile River and crossed at Giza. Problems: Nile too deep, no inlet bow, no trap, is not the Red Sea, Egyptians and more Army are on other side of Nile.
- **H. Bay of Suez Upper Gulf of Suez:** Crossing theories here use mechanisms of extra low tides, climatic lower water, tectonic plate shifts, and a

Scriptural Criteria	A. Lake Sirbonis South- East	B. Lake Manzala Tahpahnes	C. Ballah & Timsah Lakes &	D. Great Bitter Lake	E. Little Bitter Lake	F. Bow Inlet Above	G. Giza Nile River	H. Bay of Suez	HH. Mid Gulf of Suez		
Yes = Good, No = Bad except yellow	Medit.	Gk-Daphne	Marshes	area	area	Suez	area	area	area		
1 Goshen in Egypt	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
2 Goshen near most Egyptians	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
3 Goshen on East Side of Nile	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes		
4 Goshen best Land	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
5 Goshen Near Israel	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
6 Goshen near Library (House of Life)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
7 Seven days from Goshen to Rest	?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
8 Initial. Route not way to Philistines	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes		
9 Way to Philistines Near?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
10 Toward way of Red Sea	(Yes)No	(Yes)No	No	Yes	Yes	Yes	Yes	Yes	Yes		
11 Two turns only to Red Sea Camp	Yes	Yes	No	No	Yes	Yes	No	No	No		
12 Pihahiroth, Migdol, Baalzephon	No	(Yes)No	No	?	?	Yes	No	Yes	No		
13 Land Shut them in	Yes	Yes	No	No	Yes	Yes	Yes	Yes	No		
14 Nostrils plural	Yes	?	No	No	No	Yes	No	No	No		
15 Water parted by <b>Strong</b> East Wind	No	Yes	No	No	No	Yes	No	No	No		
16 Wind Mild in Middle	Yes	No	No	No	No	Yes	No	No	No		
17 Wall of Water on Right and Left	yes/no	yes/no	No	No	No	YES	Yes	no Tide	Yes		
18 EARTH swallowed army,	No	No	No	No	No	YES	No	No	No		
Man's Test, Not Scriptural	Man's Test, Not Scriptural  For the Criteria below #20 - #23 in only this yellow section  Yes is Bad (man's criteria) and No is good (God's / scripture's criteria)										
20 Sea Parting must be unexplainable Miracle - NOT God-nature caused	No	yes	No	No	No	No	Yes	No	Yes		
21 Sea Parting must be totally natural No God involvement	Yes	No	yes	?	?	No	?	?	No		
22 Overlook Unexplained Questions	No	No	No	Yes	Yes	No	Yes	No	Yes		
23 added non-Biblical event required						No	Yes	Yes	Yes		
SUMMARY											
24 Agrees with lesser Bible texts	No	No	No	No	No	YES	No	No	No		
25 Agrees with Simulations, Nature, and Logic	Yes?	Yes?	Yes?	No	No	Yes	Yes	Yes	No		

Scriptural Criteria Yes = Good, No = Bad except yellow	I Africa to Arabian Peninsula No Sinai	JJ. Eilat- Aqaba Marsh	J. Top of Gulf of Aqaba	K. Upper Middle Gulf of Aqaba	L. Nuweiba Beach Mid. Gulf of Aqaba	M. Lower Mid Gulf of Aqaba	N. Bottom Gulf of Aqaba Strait of Tiran	O. Undef. Reef Place?		
1 Goshen in Egypt	Yes	Yes	Yes	Yes	Yes	Yes	Yes	?		
2 Goshen near most Egyptians	No	Yes	Yes	Yes	Yes	Yes	Yes	?		
3 Goshen on East Side of Nile	?	Yes	Yes	Yes	Yes	Yes	Yes	?		
4 Goshen best Land	?	Yes	Yes	Yes	Yes	Yes	Yes	?		
5 Goshen Near Israel	No	Yes	Yes	Yes	Yes	Yes	Yes	?		
6 Goshen near Library (House of Life)	No	Yes	Yes	Yes	Yes	Yes	Yes	?		
7 Seven days from Goshen to Rest	No	No	No	No	No	No	No	?		
8 Initial. Route not way to Philistines	Yes	Yes	Yes	Yes	Yes	Yes	Yes	?		
9 Way to Philistines Near?	No	No	Yes	Yes	Yes	Yes	Yes	?		
10 Toward way of Red Sea	Yes	Yes	?	Yes	Yes	Yes	Yes	?		
11 Two turns only to Red Sea Camp	No	No	No	No	No	No	No	?		
12 Pihahiroth, Migdol, Baalzephon	No	?	No	No	No	No	?	?		
13 Land Shut them in	No	Yes	Yes	No	Yes	No	Yes	?		
14 Nostrils plural	No	No	No	No	No	No	No	No		
15 Water parted by <b>Strong</b> East Wind	No	No	No	No	No	No	No	Yes		
16 Wind Mild in Middle	No	No	No	No	No	No	No	No		
17 Wall of Water on Right and Left	No	No	No	No	No	No	No	?		
18 EARTH swallowed army,	No	No	No	No	No	No	No	No		
Man's Test, Not Scripture	's Test, Not Scripture For the Criteria below in only this yellow section Yes is Bad (man's criteria) and No is good (God's / scripture's criteria)									
20 Sea Parting must be unexplainable Miracle - NOT God-nature caused	Yes	No	Yes	?	?	?	?	No		
21 Sea Parting must be totally natural No God involvement	No	No	No	?	?	?	?	No		
22 Overlook Unexplainable Questions	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
23 added non-Biblical event required										
SUMMARY										
24 Agrees with all Bible texts	No	No	No	No	No	No	No	No		
25 Agrees with Simulations, Nature, & Logic	No	No	No	No	No	No	No	Yes		

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cyclone or hurricane to lower the water. Tides, tectonic shifts, and global warming low water don't fit the biblical "strong east wind" cause. And again, cyclone winds strongly parting the sea will pile-up the people if there is no center wind-blocking barrier.

**HH. Middle Gulf of Suez:** Like **G** plus a steep coral shoreline leading to a sea floor much deeper than **G**. Coral walls conflict with the Bible's "dry ground." No way for a strong east wind to part the sea.

**I. Egypt to Arabian Peninsula:** This route has two positive points and several negatives. The positives are if one requires Egyptian bureaucrats and Israel to live in upper Egypt to be near Pharaoh then Red Sea is closer. Arguments against are: 18th Dynasty New Kingdom has Pharaohs in, and protecting Lower Egypt. The Israelites were in the 'best of the land,' the Nile Delta is the best, not Luxor area. Further, "the children of Israel went out in sight of all the Egyptians" (Numbers: 33:3) but Egyptians in the Nile delta would not see. So Nu. 33:3 better agrees with Goshen in Lower, not Upper Egypt. Another proposed positive is avoidance of soldiers guarding mines in the Sinai Peninsula. But, the nature of mining at this time of early 18th Dynasty is not well known. Although the early 18th Dynasty, Hatshepsut and Thutmose III were rich, what mining and military were in Sinai is unknown. Strong Egypt needed few soldiers to control prisoners and guard mines. Mostly they would be lookouts to alert Pharaohs of border threats. Tens of soldiers could not match millions of slaves with the weapons Moses got from the banks of the Red Sea when the Egyptian soldiers drowned, as told by Josephus 1., and shown below. Also problems: travel time to the Red Sea and no water before or at the Red Sea. A big problem is the several days required to cross a parted Red Sea 65 miles from continental Africa to the Arabian Peninsula and when crossing, how to repel down and back up steep coral shore edges hundreds of feet high. If the Bible mentions the Red Sea barrier and wilderness it should mention coral cliffs. An extreme downdraft parting mechanism contradicts "a strong east wind blowing all night" (Exodus 14:21). Wind so powerful as to dry 1000 ft deep sea would kill men and cattle. This theory violates the Ex. 15:8 nostrils, the Ex. 15:12 earth swallowing, and others. One might imagine a higher sea floor that fell after the Exodus, but neither geology nor scripture even hints at such an event.

J. Top of Gulf of Aqaba: Problems are the same as other deep sea areas and too far from Goshen and Nile. Israel had just seven days of unleavened bread and then were going to have a feast. Egyptian Army would have had to set up supply lines. Too far from Goshen. Bible texts give two stops before Sea Crossing and many stops after the Sea Crossing and before Mount Sinai but this site is exactly opposite, requiring many stops before Crossing and few after.

JJ. Eilat Reed Marsh, El Yitm, Wadi Yitm, This says the Sea Crossing was in marshes above Eilat/Aqaba. Problems are: too many days from Goshen, too little water to drink, others. Positives: some fresh water, the wadi and El Yitm have similar names to Etham.

K, L, M, N: Gulf of Aqaba. Same flaws as earlier: Too deep for east wind and wind blowing water into high a high wall blows people away. Jebel al Laws in the Arabian Peninsula fits Mt. Sinai but is too close for the many listed campsites from the Red Sea crossing. Nuweiba Beach, at the bottom end of a large canyon, is there because rains in the mountains cause flash floods that wash rock debris down to form the beach and would also wash any people into the Gulf. Chariots in the Gulf of Aqaba are surely from beach sentries being surprised by flash floods from rains in the upper canyon washing into the Gulf. The Gulf of Aqaba is too deep to cross here. Ron Wyatt's low cost small boat depth sounder produced false shallow sea floor depths. Solomon said this was the Red Sea Crossing site but it could only have been a second crossing site caused by tectonic sea floor plate shifts making the sea floor go up and down and thus it is not the crossing event of Exodus Chapter 14 but could be an unknown one.

J, K, L, M, N, HH: Sites, have no realistic sea parting mechanism. J, K, L, M, theories at Nuweiba Beach, suggest parting by frozen walls of water (1) could only work as a vertical downdraft, not east wind, (2) would not stay frozen for hours, ora continuous downdraft (3) would freeze the people. These sites are too deep, wide, and extended to be dried by the biblical cause: "a strong east wind" Ex. 14:21.

**O: Unspecified Reef:** which could allegedly be dried with East wind. This is a computer simulation by Russian researchers. citation yet to be relocated.

# Notes: Analysis and comments on DREWS & HAN sea parting computer simulations:

Note: The Drews/Han simulation shows the Red Sea could have been parted with the right geography and wind but the place and wind speed and direction appear to be wrong.

Suez Canal 300 m (982 ft) wide. Bow inlet canal 100 m ~327 ft across, maybe even smaller. Crossing Lake Manzala (Tanis) 4-5km

# Crossing time calculations, Lake Manzala Drews' Theory: Could the number of creatures cross in time?

Note: These crossing time calculations would apply to any place with similar dimensions.

Summary of Below: Time and space is sufficient for the number of creatures described in the Bible to pass through the parted Red Sea. The Drews-Han time of 4 hours (scripture text is not specific) and the greater numbers of creatures (possibly 15 million) 2 to 5 times the numbers figured below could be tight.

### Analysis:

Exodus 12:37, Numbers 1:46 and other verses say the travelers were about 600,000 men, beside children. ('beside children suggests men means adults). To be conservative (smaller) assume 'men' means men and women.

Assume 300,000 families, let's say 1/2 with children, assume 4 children per family.(maybe more.) That's  $300,000 \times 1/2 \times 3 = 450,000$  children.

Thus, people were conservatively 1 million people, at least; plus flocks and herds and much cattle. Let's say at least two animals per person brings

us to 3 million creatures, at least. It could be 5 - 10 million.

Three million creatures cross an area. Assume a 3 ft. (1 meter x 1 meter) or square meter per creature.

3 million creatures at one square meter each is 3 million square meters, or 3,000 x 1,000 = 3 million

Therefore we need 3,000 m wide and 1,000 m deep (or 3 sq. km) of creatures to cross a space.

3 million square meters is 3 square kilometers.

Drews at Manzala has 5 km x 4 km area to cross in 4 hrs. That's 20 sq. km. crossing space in four hours.

A man, an ox, or sheep walks about 2 miles per hr = 3.2 km / hr. But at parted Red Sea they walk into a 35 - 55 - 65? mph wind. If they cross 4 km it requires about 2 hours to cross. Those in back must get to the water's edge. And the group, if 3 million creatures (3, crossing 5 km wide space is \*to be determined.\*)

But the ones in front must cross and get out of the way and the ones in the back need to go from the back to the shore and then cross the shore. That's about 3 km plus 4 km = 7 km at 3 km per hour, maybe even 2 km per hour. They should just be able to make it but there isn't a lot of extra time for the mud to dry out initially or if the number of creatures is too conservative, or if they are slowed by the wind, all of which are probable.

### Problem of Terms: Red Sea to Reed Sea and 'Wall' of water rather than 'Fence' or 'Border'.

Red Sea 'Yam Suph' in the Hebrew is said to be Reed Sea rather than Red Sea. All northern routes above lake Timsah use this hedging to change the sea to a shallow marsh area.

Concurrent with the above, the 'wall' of water is said to mean 'border' which does have some merit. It is said that in the Bible the same word "chowmah" is used for a border area for a sheep pen or when (1 Samuel 25:16) David's men were a 'wall' or 'border' for the men and flocks of Nabal. But David's men were an impenetrable, insurmountable barrier. A sheep fence is higher than the sheep can jump. "Chowmah" is usually used for a wall of a town, not for a low border but an impenetrable high fence. A shallow border of water caused by Drews' 62 mph wind is not the common idea of an impenetrable wall. Drews & Han must use a 62 mph wind to push the water back with the people walking directly into the full force of the wind, otherwise there is no wall on right and left. "Chowmah" is such a big wall that Chowmah is used for the wall of a city but not the walls of a house or building, a different word.

Conclusion: Drews & Han justify northern routes by minimizing words to make the effects minor to justify the desired result. A wind strong enough to make a real wall of water would be so strong that the people, flocks and herds could not walk through it. People are the same specific gravity, weight per unit volume, as water. People are essentially water. A person in a pool just barely floats with a deep breath. If he exhales, he sinks. People are essentially water. A wind strong enough to push water up into a wall will have a similar effect on people if they are walking into the main force of the wind. The only thing that can be done in the case of the computer simulations of the Exodus and Red Sea is to find a place where there is a mountain(s) in the middle so that the largest main force of the wind is blocked.

# References:

Many more may be added.

- (1) The Route of the Exodus by A. G. Weld page 238 in The Expositor July 1883 Vol. VI, as edited by Samuel Cox, Sir William Robertson Nicoll, James Moffatt:
  - $http://books.google.com/books?id=eTo2AAAAMAAJ\&dq=sirbonis+red+sea+crossing+exodus+-s\underline{irbo}\\ \underline{nis+-wyatt+-nuweiba}\&jtp=238$
- (2) Drews and Han: http://www.bbc.co.uk/news/science-environment-11383620
- (3) Drews and Han:

http://www.plosone.org/article/slideshow.action?uri=info:doi/10.1371/journal.pone.001<u>2481&imageURI=info:doi/10.1371/journal.pone.0012481.g008</u>
Notes: Drews-Han Simulation at Lake Manzala

**Strong Points:** The computer simulation verified the scripture but only partially because what the simulation needed was a better geographic location. The simulation partly showed that the actions of a 62 mph wind on the water described in the scripture will cause walls fences or edges of water if there is a bow of water pointing into the wind. With a bow of water the water will be pushed back and become A WALL of water extending on the right and left of lesser or greater heights depending on the wind strength. It also dries out a wide area of shore at the center of the bow for a length of time.

**Problems:** The 62 mph wind is a Force 10 on the Beaufort scale which is above force 9 which is said to be very difficult to walk against. So the people could not walk into the wind of Drews-Han and therefore the wall of waters on right and left could not occur while the Israelites were walking on dry ground. This violates Exodus 14:22. Other objections, the geography and water level may well have been different when and where the Red Sea parted. The Drews-Han "wall of water" height is not stated but appears not to be a wall but low fences. The route violates scripture. The Red Sea was not the Red Sea but the Yam Suph, 'reed sea', marsh excuse used for northern routes. The place names are imaginary. The Drews-Han simulation has the right idea of a bow of water Israel in the middle and it has pieces of the right mechanism to part the water. It just needs the right location and a more complete scenario that matches more scripture.

- (4) Biblical Archaeologists Review: http://www.biblearchaeology.org/post/2010/09/24/An-Appraisal-of<u>-the-2010-Drews-and-Han-WindSetdown-Models-of-the-Exo</u>dus-14-Sea-Crossing.aspx#Article
- (5) Beaufort Wind Scale: Royal Meteorologic Society http://www.rmets.org/weather/observing/beaufort.php
- (6) EXEGETICAL AND CONTEXTUAL FACETS OF ISRAEL'S RED SEA CROSSING R. Larry Overstreet TMSJ 14/1 (Spring 2003) 63-86 http://www.tms.edu/tmsj/tmsj14d.pdf
- (7) EXODUS The Route \* Sea Crossing \* God's Mountain by Gary Matheny http://www.xulonpress.com/bookstore/bookdetail.php?PB\_ISBN=9781613792971

# Water Parting Discussion

### Sea Parting Method Best Harmonizing with Scripture, Logic,

**Nature** People are the same weight per unit volume as water. This is called specific gravity. A person in a pool will float with lungs full of air, or will sink if air is exhaled. Wind has the same effect on water as it has on people and cattle. The term used in Exodus 14:22 and Exodus 14:29 (2) places) for wall (Hebrew 'chowmah' of water generally means a high, impenetrable barrier. And notice the singular 'WALL' is used, like it is a slight arc which continues from one side to the other, NOT two magic parallel walls as Cecil B. DeMille depicted in the film 'The Ten Commandments'. The Bow Inlet Red Sea parting place caused just such a 'wall' of water. The bow geography proposed by Drews - Han has a similar design but not the impassable high barrier like a city wall that the word 'chowmah' depicts. The word the scripture uses for a lesser wall of a house is 'qiyr' pronounced 'key'. God uses two witnesses, two verses Ex 14:22 and Ex 14:29, to confirm the idea of A **WALL** on the right and left. Interestingly also, most Bible versions get singular 'wall' correct. Notice in both verses

Exodus 14:22 and Exodus 14:29 that 'wall' is singular but 'waters' plural.

HEIGHT: 'Chowmah' depicts height and may explain Exodus 14:20 which says that Israel had light but there was no light for the Egyptians, probably because the wall of water, the pillar of cloud, or both, blocked the light. Exd. 14:20 "So it came between the camp of the Egyptians and the camp of Israel. Thus it was a cloud and darkness [to the one], and it gave light by night [to the other], so that the one did not come near the other all that night."

An eastern full moon and an early morning eastern sun would be light all night for the Hebrews. A high wall of waters and a pillar of cloud above would block the light in front of the Egyptian army but provide light to Israel. A third reason the extended wall of waters was high is that the returning surge not only drowned the army but drowned them up on the shore, some distance. Evidence indicates the surge hit a high sand riverbank to the east, which collapsed burying and washing up the army. Ex 14:30 attests to this in saying Israel saw the dead upon the shore, not just at the shoreline. Moses, probably among the first while crossing the Red Sea, was at an angle to the wall of water and apparently saw the light in front and darkness behind, if darkness was at least partly due to the wall of water.

### STRONG EAST WIND . . . LOGIC: Natural or

Supernatural: The water was parted either naturally, supernaturally, or by a combination of both. The Bible says the water went back"by a strong east wind blowing all night," (Exodus 14:21) indicating nature was the direct causal force, but many verses throughout the Bible give God the credit, indicating God was the primary cause using nature as the agent. About 50 Bible verses speak of God as being the God or Lord of heaven and earth.

So God supernaturally directed natural means to part the sea. Taking the Bible's words in Ex: "And Moses stretched out his hand over the sea; and the LORD caused the sea to go [back] by a strong east wind all that night, and made the sea dry [land], and the waters were divided." Rodger Dalman Th. D. says: 1 "While God can do very unusual things, He does seem to work through natural means more often then not. It is therefore appealing to see this event as a miracle of timing rather than a gross violation of the natural physical laws which God has written into His creation."

It is a miracle of timing and more. The Red Sea's perfectly timed opening and closing by wind occurred in a natural geological theater having many features essential to the event's functioning. This theater of the Red Sea parting event appears to have been a specifically crafted landscape over hundreds of miles in all

directions, a miracle of creation. It is a miracle of all the sciences. It is a miracle of practically every natural phenomenon - all biology, animals, insects, fire and hail, plankton bloom, sicknesses, etc. Only because the Egyptians were so intimidated by all the terrible wonders. did they let the Israeli slaves go. However when the ancient, idolworshipping Egyptians returned to their greedy, oppressive nature the parting of the Red Sea occurred, probably the greatest Exodus wonder of all. And today, an even greater miracle, unknown to almost everyone will be witnessed, God has crafted the earth and seas not only to release the slaves and punish the greedy, but also to preserve evidence and show that the Red Sea was indeed parted by an act of God. In the near future that evidence can and will be dug up to show where the parting of the Red Sea occurred.

LOGIC Continued: What kind of natural east wind? "Compare scripture with scripture" preachers often say. So, the locusts were blown into Egypt by an east wind. Exodus 10:13 "And Moses stretched forth his rod over the land of Egypt, and the LORD brought an east wind upon the land all that day, and all [that] night; [and] when it was morning, the east wind

brought the locusts."

But when the locusts were blown out of Egypt it was a mighty strong west wind. Exodus 10:19 "And the LORD turned a mighty strong west wind, which took away the locusts, and cast them into the Red Sea; there remained not one locust in all the coasts of Egypt."

In the scripture, when the locusts are blown into Egypt they are blown by an east wind blowing all day and all night. The wind blowing the locusts in is not said to have any great strength so this wind would probably be no more than 20 or 30 miles per hour.

In contrast, the wind that blew the locusts out of Egypt was a <u>mighty</u> strong west wind meaning a violent storm ( Force 10 or 11 on the Beaufort

# YES, THIS Matches Scripture east wind A WALL as an extended border on the right and on the left Parallel walls on the right right and on the left

Hebrew 'Chowmah' = a high WALL extended border
Fig. C Effect of wind against arc vs. wind against straight channel

Scale)<sup>2</sup> probably no more than 73 miles per hour, or less. Over 73 mph, would have been a hurricane/typhoon/cyclone for which the Old Testament generally uses the terms tempest or whirlwind.

Logically then, the strong east wind which blew all night and parted the Red Sea was between 35 and 55 miles per hour where Moses, the person originally writing the account, was standing and walking. People begin have difficulty walking into a Beaufort Force 6. At the Bow Inlet it would be stronger on the sides than in the middle. So by the Beaufort Scale it was probably a high Force 8 or Force 9 (about 40 - 50 mph) in the middle of the inlet because this is a strong wind which just makes walking somewhat difficult. But it may have been a force 10 or 11, 60 - 70 mph wind at the edges, through the Mitla and Giddi Passes that match ideally the top and bottom of the Bow Inlet. The Giddi Pass is just east of the neck from the Little Bitter Lake to the North end of the Bow Inlet. And the Mitla Pass is just east of the neck from the Gulf of Suez to the South end of the Bow Inlet.

When the Rains Failed: Studies in Climatology and the Blblical Text: Rodger Dalman Chapter 6, page 44, copyright 2009 Books\When the Rains Failed\Ch. 6 - The Exodus and Climatology.pdf

<sup>&</sup>lt;sup>2</sup> Beaufort Wind Force Scale http://en.wikipedia.org/wiki/Beaufort\_scale

## **Bow Inlet Red Sea Crossing Site**

**INTRODUCTION:** When Moses parted the Red Sea the events actually began with the seemingly unimportant Locust Plague. described in Exodus 10:4 - 10:19. This plague played a critical, major role in the whole Exodus sea parting event and is surprisingly important today.

PRELIMINARIES: Fig.1 shows what is now the Suez Canal area just prior to the Exodus Locust Plague. The horizontal blue line, "Canal of the Pharaohs" or Wadi Tumilat, connects the Nile River to Lake Timsah. This canal was first dug in the 11<sup>th</sup> Dynasty (ca. 2100 B.C.) but the Exodus was much later, in the 18<sup>th</sup> Dynasty, 1447 B.C. On the eastern side of the Wadi Tumilat, toward Lake Timsah was Pithom, later at or near Heroopolis. Heroopolis was once the major city at the top of the

Heroopolite Gulf, the name of the extension of the Gulf of Suez from Suez to Lake Timsah and toward the Nile.

The Heroopolite Gulf, a northern extension of the Red Sea, was noted by historians Herodotus, Strabo and Pliny. (See references in Questions, pg. 35 below.) The extension of the Red Sea this far north is well documented historically. At Lake Timsah the water channel turns south to the stomach-shaped Great Bitter Lake, down to smaller Little Bitter Lake, through the Bow Inlet, and out to the Gulf of Suez. R. Larry Overstreet (page 3 above) gives an in depth discussion of Red Sea biblical and nonbiblical references to say that the extended upper Gulf of Suez (the Bow Inlet) <u>must be the</u> site of the Red Sea Fig. 1 shows the geography before the Locust plague. A big mountain,

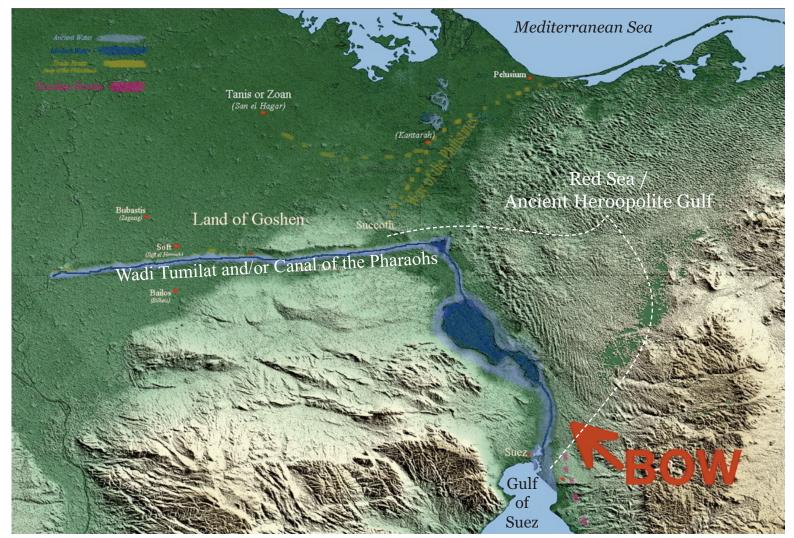


Fig. 1. Red Sea area approx. geography prior to the Locust Plague. Waterway Nile to Gulf of Suez. Pharaoh Hatshepsut, a strong candidate to be an Exodus Pharaoh, left temple pictures of ships showing she took an expedition from the Nile River, through the Bitter Lakes to the Gulf of Suez and down to the Land of Punt in Africa.

bottom middle, is Migdol (tower). The bottom of the Bow Inlet at Suez is PiHahiroth, the 'Mouth of the Gorge' (or canal). Fig 1's red arow points at the Bow Inlet and Baal-Zephon, a "high place" Baal worship, bluff matches other Baal-Zephons on the Mediterranean's south east (Daphne, Egypt) and north east (Mt. Aqraa, in Turkey near Syria) coasts, and at Zaphon in Canaan (now Israel) These Baal-

Zephons faced westerly, were Baal worship "high places" and were sailors'/travelers' high landmarks and fire "lighthouses." The Sinai Baalzephon high point was center of the BOW in Fig. 1 and the top of the sand river bank in Fig. 2. Estimating from maps, it was about 100 meters (328 feet) above sea level and visible far down the Gulf of Suez and up the Heroopolite Gulf to Lake Timsah.

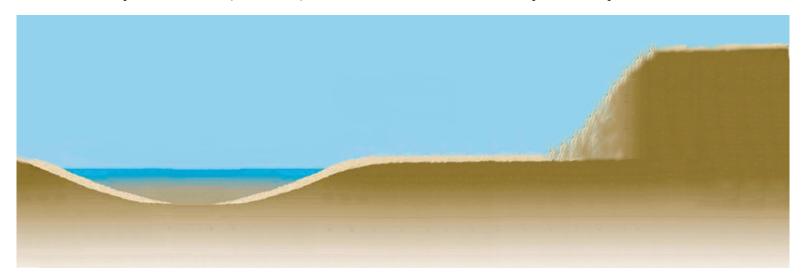


Fig. 2 Red Sea Bow Inlet Center of Canal Geography Section at time of Moses, before plagues. Looking from the South toward the North at a section of the Red Sea crossing area from Egypt on the left to the Sinai Peninsula on the right. This is essentially looking northward up the Suez Canal from near it's beginning at the South at Gulf of Suez. It is about 30 degrees 6 minutes North Latitude by 32 degrees 39 minutes East Longitude. The importance of this high sand river bank will be seen later.

In Fig 2. the 300 ft. high ridge on the right of the graphic is the site of BaalZephon. The BOW Inlet canal waterway is shown on the left. This section is a vertical cut in Fig. 1 from the point of the Red Arrow and extending through the green to the left. The exact width, depth, and arc are unknown but this is expected to be somewhat close.

It was not only ships that traveled up and down this waterway from the Gulf of Suez through the Bow Inlet to the Bitter Lakes, Lake Timsah and up through the Wadi Tumilat Canal to the Nile River, but also salt water went in and out the inlet shown in Fig. 1 and Fig. 2. and the Bitter Lakes and Lake Timsah could be sometimes salty and sometimes partly fresh water depending on the Nile River and winds. The Red Sea at the top of the Gulf of Suez is some of the saltiest open water on earth due to the heat and high evaporation rate. The water going in and out normally means the Bitter Lakes and the Bow Inlet would be too salty to water flocks and herds. This is probably

why they were called Bitter. Moses and Israel would normally have a problem with the salt water (not having proper fresh water for the millions of creatures) if they were to take this route to leave Egypt.

The above geography existed at the end of Exodus Chapter 9 when there occurs the Plague of Hail mixed with Fire. (Much more is to be said of the hail and fire plague elsewhere.)

### **LOCUST PLAGUE BEGINS - 24 hr. EAST WIND:**

Exd 10:13, And Moses stretched forth his rod over the land of Egypt, and the LORD brought an east wind upon the land all that day, and all [that] night; [and] when it was morning, the east wind brought the locusts.

In Exodus Chapter 10:1-15 Moses warns, then brings, the Locust Plague, which enters Egypt by an East wind blowing day and night for 24 hours. An interesting thing

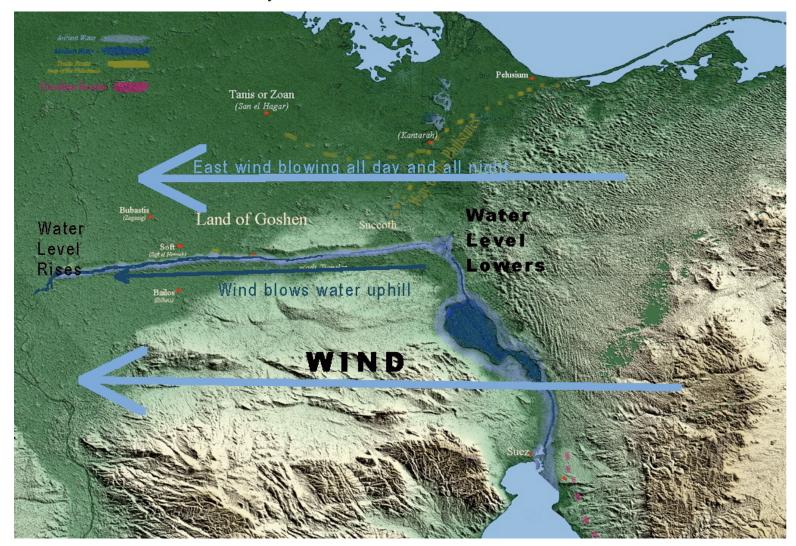


Fig. 3 Locusts are blown into Egypt with an East wind blowing all day and all night.

happens in a certain waterway as the Locusts are blown into Egypt. As the wind blows East to West (right to left in Fig. 3) along the Canal of the Pharaohs or Wadi Tumilat, from Lake Timsah toward the Nile River, the water is blown westward, slightly uphill, from Lake Timsah into the Nile River. Rather than the The Canal of the Pharaohs or Wadi Tumilat having only a slight drop in water level from the Nile to Lake Timsah, the Nile end is now much higher and the opposite end has become lower. This is called 'storm surge' in hydrology, the study of water.

This 'storm surge' is shown in Fig.'s 3 & 4 as Lake Timsah's water level being low and the water in the west toward the Nile being high. The horizontal blue line, the Canal of the Pharaohs (Wadi Tumilat), going from the Nile in the west to Lake Timsah in the east, is "charged" to start a water current flow faster than normal. Such 'sloshing' large wave returns from storm surges are called

seiches by water movement professionals, hydrologists...

This Canal of the Pharaohs existed but some analysts question whether it existed at the time of the Exodus. Hatshepsut, a probable Exodus-era Pharaoh, depicted her ships both in the Nile River and in the Ocean at Punt off Africa. This is evidence that the Wadi Tumilat, Canal of the Pharaohs, existed and was navigable during the Exodus and may have been dug, re-opened, or maintained by Joseph and the Israelites.

THE LOCUSTS PLAGUE EGYPT: In the Exodus story, the Locust Plague is now throughout the coasts of the Nile and the water level at the Nile end, the western end of the Wadi Tumilat is extra high. While the locusts are in Egypt, the water momentum naturally changes from an abnormal westward flow (when blown by the locust-in East Wind) to being in a state of being ready to flow downstream.



Fig. 4 The Locust-In east wind pushes water upstream, from right to left, from east to west, in Wadi Tumilat so that extra high water levels occur in the west end of Wadi Tumilat and low in Lake Timsah.

The canal water's western momentum has changed and is ready to flow eastward again but now faster than normal. The water in the Wadi has just changed direction and started to go east when the people and Pharaoh have had quite enough of the locusts. This release of high to low level storm surge water by water sloshing back and forth over an area due to gravity and momentum, these 'seiches' are very common in the Great Lakes of the United States and other large bodies of water.

### PHARAOH BEGS MOSES TO PRAY FOR RELIEF LOCUSTS OUT - MIGHTY STRONG WEST WIND

Pharaoh begs Moses for God's mercy so Moses prays and

the Locusts are blown out with a MIGHTY STRONG WEST WIND, but Pharaoh does not promise to release the slaves. Notice the wind strength is explicitly given as a Mighty Strong West wind, distinctly different in speed and direction from the other specially stated winds.

Exd 10:16 Then Pharaoh called for Moses and Aaron in haste; and he said, I have sinned against the LORD your God, and against you.

**Exd 10:17** Now therefore forgive, I pray thee, my sin only this once, and intreat the LORD your God, that he may take away from me this death only.

**Exd 10:18** And he went out from Pharaoh, and intreated the LORD.

Exd 10:19 And the LORD turned a mighty strong west wind, which took away the locusts, and cast them into the Red Sea; there remained not one locust in all the coasts of Egypt.

The "Mighty Strong West Wind" plus the sloshing seiche, causes a new strong, high current flow eastward, back

down the whole Heroopolite Gulf to the Gulf of Suez and does several incredible things. It starts a strong current of fresh Nile water through the whole Heroopolite Gulf, that is, the Wadi Tumilat, Bitter lakes, and Bow Inlet, cleaning out the salt water for the coming people and herds.

The wind is directed by the valleys in the mountain passes in Egypt, to the west, (Fig. 5) to also push the water through the Bitter Lakes and Bow Inlet.

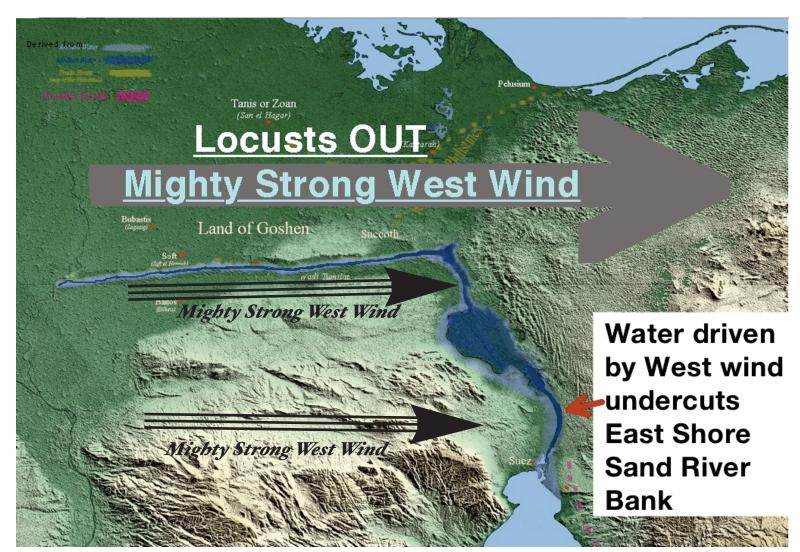


Fig 5. Mighty Strong West Wind blows Locusts out of Egypt and water down the canal to Lake Timsah



Fig. 6 Bow Inlet Center Section as Locusts are Blown out of Egypt by a Mighty Strong West Wind. Although the wind is blowing from left to right in the diagram, the Bow Inlet has a strong water current from 'behind' the picture, out toward the viewer, as this wind driven undercutting is occurring.

The wind through the mountain passes to the west is directed right at the water in the middle of the BOW INLET, washing it against the bottom of the 300 foot high sand river bank to the east undercutting it and washing away the sand. The geography for 100 miles around has many features that contribute to accomplish this riverbank undercutting by a Mighty Strong West wind.

The undercut sand riverbank although important, is concealed and yet hinted at, both scripturally and geographically. It is located just on the other side of the inlet from where Moses stands to part the Red Sea.

The sand that was washed out has left a marker on the terrain, seen as crescent dunes where the sand is loose and can be located slightly downstream on maps to this day.

### Fig. 7 Right:

An example of an undercut sand river bank (Sand River, South Carolina, USA) shows the effect of erosion after a high storm current has washed against the river bank and the resulting partial collapse of the bottom of sand river bank. (mirror image)



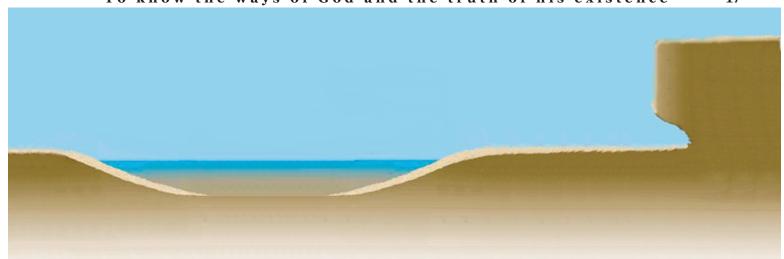


Fig. 8 High sand cliff on the Gulf's eastern shore after locusts go out of Egypt by a mighty strong west wind. The current wets the sand making it solid and shaping it approximately as shown.

### SAND RIVER BANK DRIES, 3 DAYS DARKNESS, SEDER - PASSOVER PREPARATION:

The high sand river bank just sits drying in the intense Egyptian spring sun, like it is waiting, while the fresh water continues to flow from the Nile through the Heroopolite Gulf. After the locusts, Exd 10:19, God hardens Pharaoh who refuses to let Israel go, Exd. 10:20. In Egypt there is darkness 3 days which can be felt before beginning the preparation for the Seder or Passover. Exd. 10:21 In the Egyptian homes there are three days of darkness but the Israelites have three days of Light. Pharaoh asks Moses to remove the darkness. Moses says we must have cattle also. Pharaoh yet refuses to let the slaves go and tells Moses he will never see Pharaoh's face. again. The Darkness leaves naturally. Pharaoh wins?

<u>Exd 10:22</u> And Moses stretched forth his hand toward heaven; and there was a thick darkness in all the land of Egypt three days:

Exd 10:23 They saw not one another, neither rose any from his place for three days: but all the children of Israel had light in their dwellings.

Exd: 10:29 And Moses said, Thou hast spoken well, I will see thy face again no more.

Beginning in Exodus chapter 11 God directs Moses to tell Israel to borrow jewels from the Egyptians before the Seder, which today is often called Passover. This first

Passover is when the firstborn in every household of Egypt die but the Israelites which have the Blood of the Lamb on the lintel and the doorposts are saved. How long does the high sand riverbank dry out in the sun and the fresh water purge the salty water from the Bitter Lakes and Heroopolite Gulf? After the Locust were gone Pharaoh probably said that same day that the slaves could not leave. Then God brought a plague of darkness for 3 days. Then the Seder preparation and borrowing of jewels and passover is as many as 14 days. After the Passover the Exodus departure and travel to the Bow Inlet site is 4 days as will be shown elsewhere. So the sand drying and salt water purging of the Gulf is 3 + 14 + 4 = 21 days, roughly.

As sand dries it loses the water surface tension between sand particles. Sand sculptures hold together by the surface tension of the water between the grains of sand. This is why wet beach sand is firm but dry sand 'gives' and has no strength. This Red Sea area, one of the hottest and driest places on earth, causes a high evaporation rate which also causes the Red Sea waters at the Gulf of Suez to be about the saltiest open sea water on earth. The Sinai side, high sand river bank (with BaalZephon on top), after drying in the hot sun about 21 days, is ready to collapse.

On the first Seder or Passover night, 1447 B.C. all the firstborn of Egypt die who are not protected by the Passover lamb's blood on the door frame. Pharaoh let Moses and the Israelites go. Leave! Get out of here.

Exd 13:17 And it came to pass, when Pharaoh had let the people go, that God led them not through the way of the land of the Philistines, although that was near; for God said, Lest peradventure the people repent when they see war, and they return to Egypt:

Exd 13:18 But God led the people about, through the way of the wilderness of the Red Sea: and the children of Israel went up harnessed

out of the land of Egypt.

**Exd 14:8** And the LORD hardened the heart of Pharaoh king of Egypt, and he pursued after the children of Israel: and the children of Israel went out with an high hand.

**Exd 14:9** But the Egyptians pursued after them, all the horses [and] chariots of Pharaoh, and his horsemen, and his army, and overtook them encamping by the sea, beside Pihahiroth, before Baalzephon.

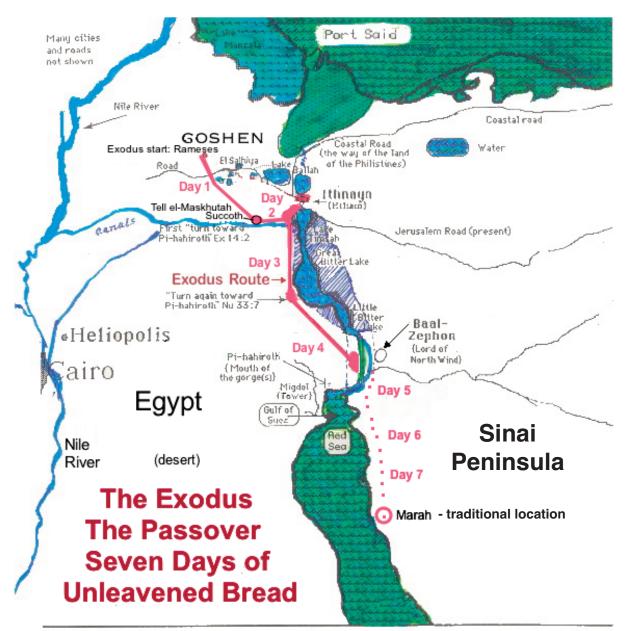


Fig. 9 Proposed geography and route of Israelites at the time of the Exodus.

Day four after the Plague of the Death of the Firstborn, the Seder, the first night of Passover, the slaves appear "entangled by the land; the wilderness has shut them in." Exodus 14:3 Therefore Pharaoh is very confident and Pharaoh and the army pursue the esceped slaves.

Exd 14:10 And when Pharaoh drew nigh, the children of Israel lifted up their eyes, and, behold, the Egyptians marched after them; and they were sore afraid: and the children of Israel cried out unto the LORD.

Exd 14:11 And they said unto Moses, Because [there were] no graves in Egypt, hast thou taken us away to die in the wilderness? wherefore hast thou dealt thus with us, to carry us forth out of Egypt? Exd 14:12 [Is] not this the word that we did tell thee in Egypt, saying, Let us alone, that we may serve the Egyptians? For [it had been] better for us to serve the Egyptians, than that we should die in the wilderness.

Exd 14:13 And Moses said unto the people, Fear ye not, stand still, and see the salvation of the LORD, which he will shew to you to day: for the Egyptians whom ye have seen to day, ye shall see them again no more for ever.

<u>Exd 14:14</u> The LORD shall fight for you, and ye shall hold your peace.

Exd 14:15 And the LORD said unto Moses, Wherefore criest thou unto me? speak unto the children of Israel, that they go forward:

Exd 14:16 But lift thou up thy rod, and stretch out thine hand over the sea, and divide it: and the children of Israel shall go on dry [ground] through the midst of the sea.

Exd 14:17 And I, behold, I will harden the hearts of the Egyptians, and they shall follow them: and I will get me honour upon Pharaoh, and upon all his host, upon his chariots, and upon his horsemen.

Exd 14:18 And the Egyptians shall know that I [am] the LORD, when I have gotten me honour upon Pharaoh, upon his chariots, and upon his horsemen.

As Egypt did not honor the LORD in history this verse may be more about today when the people of the world, spiritually the "Egyptians," can see the archaeological evidence and realize the God of heaven and earth is real and true.

Exd 14:19 And the angel of God, which went before the camp of Israel, removed and went behind them; and the pillar of the cloud went from before their face, and stood behind them:

Exd 14:20 And it came between the camp of the Egyptians and the camp of Israel; and it was a cloud and darkness [to them], but it gave light by night [to these]: so that the one came not near the other all the night.

Exd 14:21 And Moses stretched out his hand over the sea; and the LORD caused the sea to go [back] by a strong east wind all that night, and made the sea dry [land], and the waters were divided.



Fig. 10 A Strong East Wind causes a Wall of Waters on Right (behind observer) and Left (shown).

<u>Exd 15:8</u> And with the blast of thy nostrils the waters were gathered together, the floods stood upright as an heap, [and] the depths were congealed in the heart of the sea.

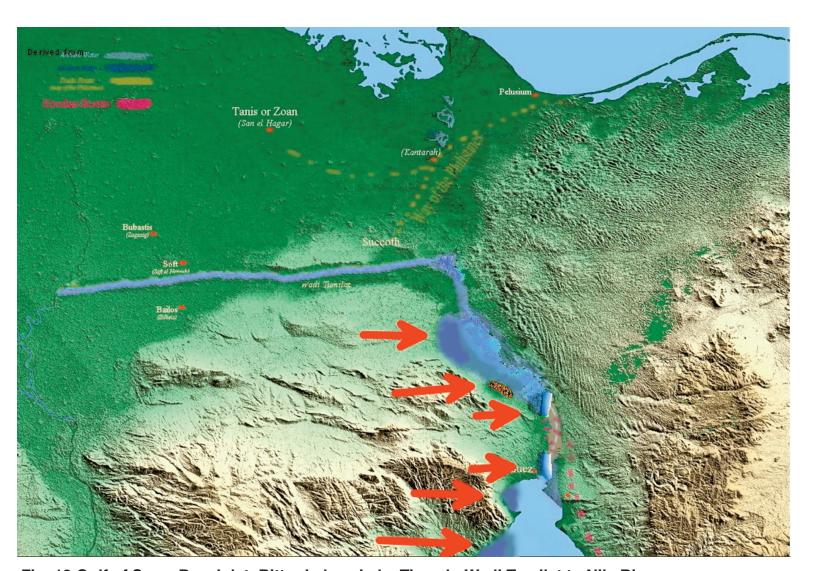


Fig. 12 Gulf of Suez, Bow Inlet, Bitter Lakes, Lake Timsah, Wadi Tumilat to Nile River.

Exd 15:8 "And with the blast of thy nostrils the waters were gathered together, the floods stood upright as an heap, [and] the depths were congealed in the heart of the sea." Wind (not shown) is from the right of picture. Red Arrows point to storm surge 'congealed' waters in six areas. Waters are "A WALL" on Right & Left ends of Bow and waters are also 'congealed' in the hearts of the deep. "Congealed" is common Hebrew qapha' pronounced ka·fa' (Strong's

H7087). 'Congealed' is like to fold up one's knees, more like to heap up or to concentrate together. It is not, as some sea parting theories claim ice, Hebrew "qerach" pronounced keh'·rakh (Strong's H7140). Nor, as other sea parting theories claim, is it a rare, extreme, 4th state of super-concentrated water (citation?) which would probably be qapha' qapha' in Hebrew if it were in view here.

The wind at the center of the Bow Inlet is partly blocked by the mountain and sand river bank ridge in the middle of the western Sinai. Faster, greater winds are channeled at the Bow Inlet top and bottom and over the Bitter Lakes, northwest and Gulf of Suez, southwest. To the Northwest are Little and Great Bitter Lakes. To the Southwest is the top north Gulf of Suez west bay mirroring Little Bitter Lake and in the Gulf of Suez to the south is a larger bay that roughly mirrors Great Bitter Lake's shape and size.

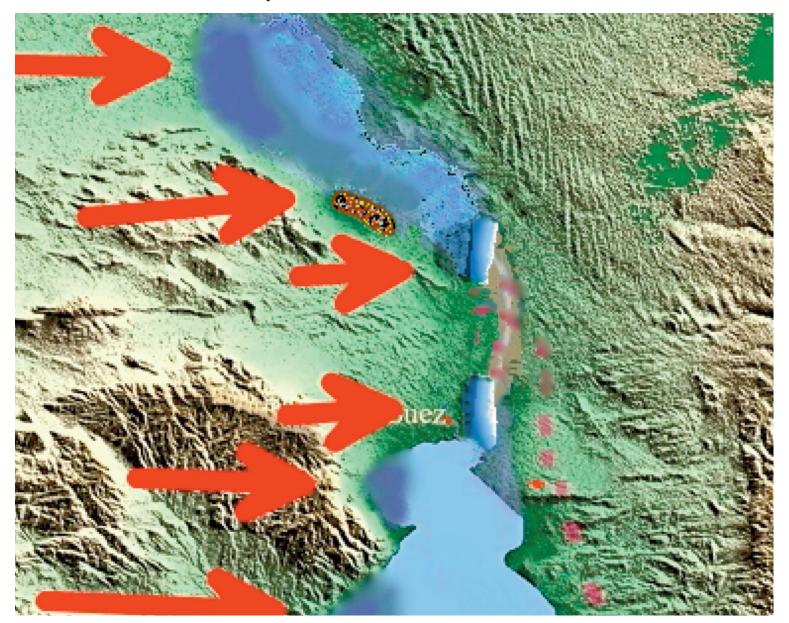


Fig. 13 Closeup of Fig. 12 shows the army (brown with light colored specs) held back by the blocking of the northern or left wall of water while the slaves (pink spots) escape across the parted Red Sea and travel southward to the Springs of Moses, then to Marah.

Exd 14:22 And the children of Israel went into the midst of the sea upon the dry [ground]: and the waters [were] a wall unto them on their right hand, and on their left.

The Israelites stayed close to the vertical part of the sand river and thus were shielded from the strongest winds.

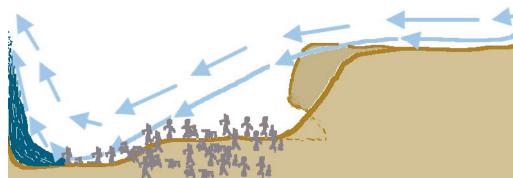


Fig. 14 Crossing the Red Sea, with a high sand bank shielding the wind between mountain passes

Greater wind volumes hit the large lakes and gulf.

Exd 15:8 And with the blast of thy nostrils the waters were gathered together, the floods stood upright as an heap, and the depths were congealed in the heart of the sea.

Multiple piles of water become essentially equally balanced in size and position to the north and the south.

The slaves are able to flee across the Bow Inlet between a wall of waters on right and left and proceed on the beach south of the high sand river bank. This crossing area is near Pi-ha-hi-roth and Pi-ha-hi-roth is the mouth of the gorge or mouth of the Bow Inlet canal. Pihahiroth is the area near Suez city today where the Bow Inlet part of the Heroopolite Gulf opens into the Gulf of Suez.

Below: A strong east wind (note the specific speed) starts and blows all night. It is not the locust-out "Mighty Strong" wind or locust-in normal, average, steady wind when the locusts were blown in to Egypt. It is specifically a "Strong East Wind all that night."

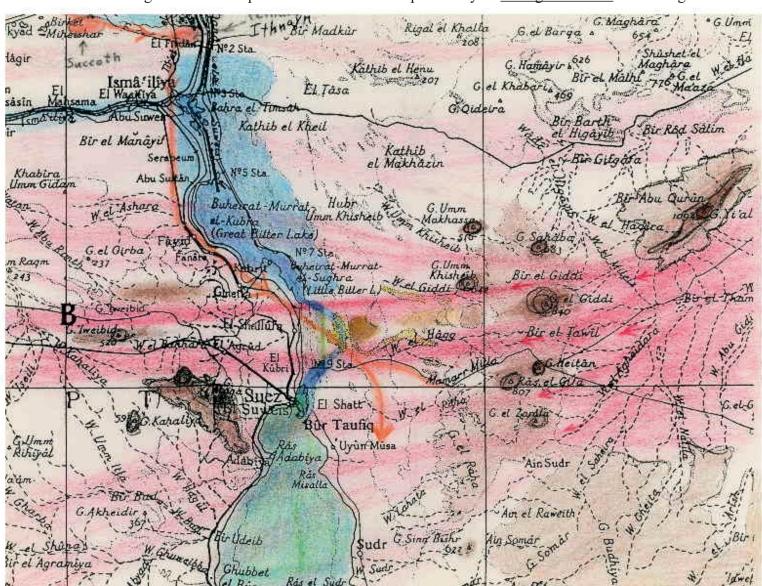


Fig. 15 Channels of Wind (pink) blow primarily through two mountain passes (Nostrils), against Bow Inlet top and bottom. Other winds blow against the Bitter Lakes, top and the Gulf of Suez, bottom.

The mountains (brown/black circles) of Western Sinai (right side) have passes that channel the east wind (pink) to be lighter in the middle, about 45 - 55 mph. Two high velocity tongues of wind blow through the Giddi (north) and Mitla (south) passes and match the Bow Inlet top and

bottom. As Moses, left of center, looks eastward to our right, two wind channels pile up the waters (green - blue) as a wall on the right (south) and the left (north). Moses and Israel (orange line arrow) pass thru as other winds hit the Bitter Lakes and Gulf of Suez further north and south.

Exd 14:23 And the Egyptians pursued, and went in after them to the midst of the sea, [even] all Pharaoh's horses, his chariots, and his horsemen.

Exd 14:24 And it came to pass, that in the morning watch the LORD looked unto the host of the Egyptians through the pillar of fire and of the cloud, and troubled the host of the Egyptians,

**Exd 14:25** And took off their chariot wheels, that

they drove them heavily: so that the Egyptians said, Let us flee from the face of Israel; for the LORD fighteth for them against the Egyptians.

<u>Exd 14:26</u> And the LORD said unto Moses, Stretch out thine hand over the sea, that the waters may come again upon the Egyptians, upon their chariots, and upon their horsemen.

**Exd 14:27** And Moses stretched forth his hand over the sea, and the sea returned to his strength when

the morning appeared; and the Egyptians fled against it; and the LORD overthrew the Egyptians in the midst of the sea.

Exd 14:28 And the waters returned, and covered the chariots, and the horsemen, [and] all the host of Pharaoh that came into the sea after them; there remained not so much as one of them.

**Exd 14:29** But the children of Israel walked upon dry [land] in the midst of the sea; and the waters

[were] a wall unto them on their right hand, and on their left.

Exd 14:30 Thus the LORD saved Israel that day out of the hand of the Egyptians; and Israel saw the Egyptians dead upon the sea shore.

Exd 14:31 And Israel saw that great work which the LORD did upon the Egyptians: and the people feared the LORD, and believed the LORD, and his servant Moses.

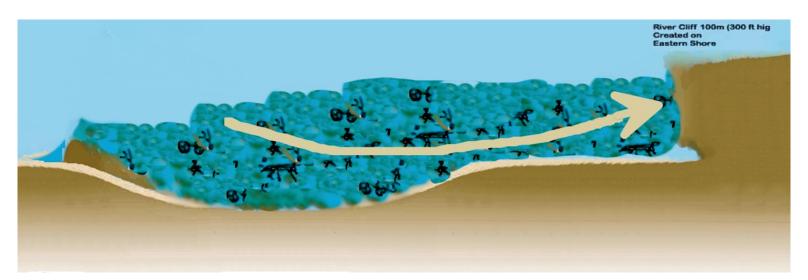


Fig. 16 Bow Inlet cross section shown as army of Egypt is drowned in the sea. Now contradictions? Exd 15:1 Then sang Moses and the children of Israel this song unto the LORD, and spake, saying, I will sing unto the LORD, for he hath triumphed gloriously: the horse and his rider hath he thrown into the sea. Exd 15:2 The LORD [is] my strength and song, and he is become my salvation: he [is] my God, and I will prepare him an habitation; my father's God, and I will exalt him.

Exd 15:3 The LORD [is] a man of war: the LORD [is] his name.

**Exd 15:4** Pharaoh's chariots and his host hath he cast into the sea: his chosen captains also are drowned in the Red sea.

### Exd 15:5 The depths have covered them: they sank into the bottom as a stone.

If the pursuing army sinks to the bottom and even "INTO the bottom" as a stone then the army is totally lost on the river bottom, out of sight. But a previous verse seems to express a different thought which is against their sinking as a stone The verse in Exodus 14:30 below appears to contradict the verses that say they sank.

<u>Exd 14:30</u> Thus the LORD saved Israel that day out of the hand of the Egyptians; and Israel saw the Egyptians dead upon the sea shore.

**Problem**: It would seem that there are two contradictory scriptures in the sequence.

So which is it? Either they sank as a stone or they washed up on the shore. One might say, well, some of each. But if it was some of each it should say "some sank" and "some washed up on shore." But it doesn't. The scripture specifically says they sank as lead and as a stone INTO the bottom but they washed up on the shore THAT DAY. And it takes three days for drowning victims' bodies to begin to decompose and rise to the surface and by then Israel was 40 miles away.

By the way, some Egyptologists, and theologians regard Hatshepsut as the most likely Pharaoh which commanded the army and pursued Israel. See Exodus 14:10 above. Hatshepsut's mummy has been identified in Egypt. Assuming this is true, this says Hatshepsut ended up on the shore and was recovered by the Egyptians to be mummified.

Did they float or sink? Well they sank, as verse Exodus 15:10 agrees. How then did they get on the shore?

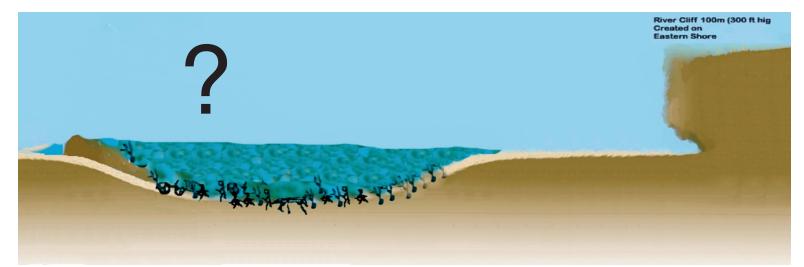


Fig. 17 If the Army sank to the bottom like a stone, or lead, how did Isreal see them dead on shore? Exd 15:6 Thy right hand, O LORD, is become glorious in power: thy right hand, O LORD, hath dashed in pieces the enemy.

<u>Exd 15:7</u> And in the greatness of thine excellency thou hast overthrown them that rose up against thee: thou sentest forth thy wrath, [which] consumed them as stubble.

**Exd 15:8** And with the blast of thy nostrils the waters were gathered together, the floods stood upright as an heap, [and] the depths were congealed in the heart of the sea.

**Exd 15:9** The enemy said, I will pursue, I will overtake, I will divide the spoil; my lust shall be satisfied upon them; I will draw my sword, my hand shall destroy them.

Exd 15:10 Thou didst blow with thy wind, the sea covered them: they sank as lead in the mighty waters.

**THE ANSWER** to the contradiction is the large, far, surges of water on each side, much more than the high wall of water. The big surges of water sat upstream and downstream, far northeast and southwest.

What occurred was not just the return of the wall of water immediately on the right and left sides, ie. the south and the north sides respectively, but the major deluge was all the extra water that was pushed into the storm surges to the northwest in the Great Bitter Lake, and to the southwest in the Gulf of Suez. In Fig. 18 / Fig. 12 below, the very top arrow points to the large volume of storm surge water in the west side of Great

Bitter Lake and the very bottom red arrow points to the very large storm surge in the more southern, larger area in the Gulf of Suez.

The big storm surges to the far north and south and the small ones near the center exist only temporarily in the strong wind. As the wind eases, the water starts to return to the Bow Inlet and several clever and amazing things happen which will be described. Meanwhile, the army that followed Israel down the plain, has become trapped, themselves, behind the north visible high wall of water on the small plain west of Little Bitter Lake.

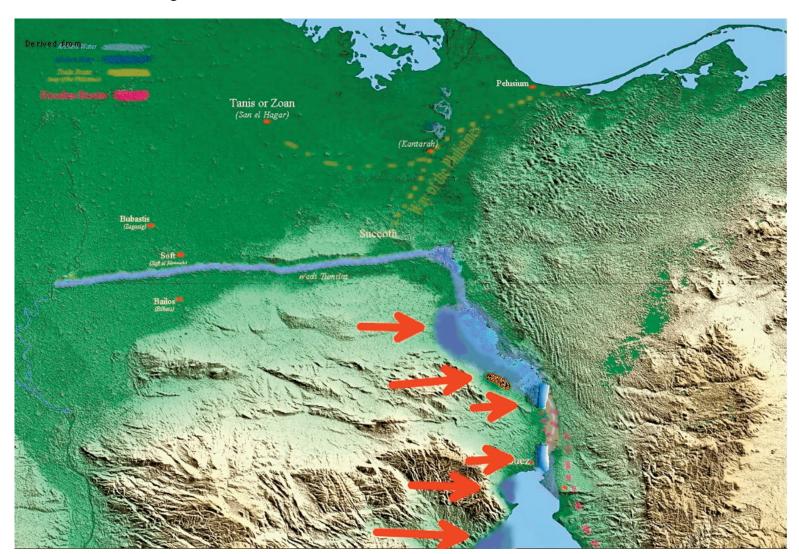


Fig. 18 / Fig. 12 Large surges of water from northwest and southwest start toward Bow Inlet center.

The red arrows point to the high water 'storm surge' areas of dark blue 'congealed' waters on the west shores or 'lee' shores of the Bitter Lakes to the north and the Gulf of Suez to the south. (The 'Lee Shore' is a sailor's term for the shore that the wind hits when the wind comes off the water. It is a bad shore for a boat to approach because the

boat will be in danger of permanently running aground and even breaking up.) In this picture the wind from the east has blown the water into six places of extra high water. This is called 'Storm Surge' with the wind driven water forced to be several feet or meters higher on the western or lee shore on the left than on the eastern shore on the right.

In Fig. 19 below, it is early morning after the night of the Red Sea crossing and the escaping Israelite slaves are in the last hour of passing through the Red Sea on dry ground and the wind has already started to decrease in speed. The storm surges, the seiches, are already in the process of starting their return. The very fact that there were storm surges to the north and the south means that some water was pulled from behind the high "wall of water on the right and on the left." These very high walls of water after being initially produced by the high winds now needed only a lighter wind to be sustained because some of the water behind them was not pushing them to collapse because the water that would have been behind to push had been taken by the wind farther away in the storm surge. But now it is returning.

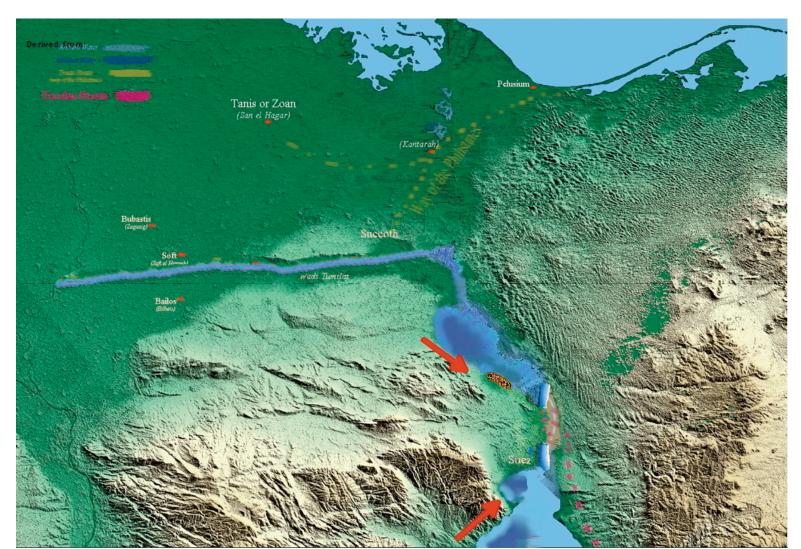


Fig. 19 Storm surges (seiches) begin to return from both the northeast and the southwest.

Notice the bodies of water and the storm surges and the mountain passes to channel the wind all have three places to 'congeal' the water to the northeast and three places to 'congeal' the water to the southeast. Not only are the storm surge areas there, they match up perfectly to form a stereoptic geographic configuration. That is to say, the water lobes and mountain ridges and passes to the east, form a mirror image of six lobes to the north and south. Furthermore, the mirror image is not only two dimen-

sional over a great area, but it is also mirrored in depth. The depths are greatest in the farthest lobe areas and gradually shallower in the areas closer and closest to the center of the bow. It will be seen that this depth variation makes a critical difference in operation. It is almost like there is this giant machine that was made to do exactly what it did, used once, and then was left out in the open waiting for it to be rediscovered of how it worked.

Note, this account approximates the actions of winds, waters, peoples, and animals in the approimate geographic theater.. A more exact geography and wind/water action will require computer simulations, estimates, and assumptions. The seiches and tides from the north and the south would be better known after computers simulated the actions of the seiches and shorelines. Also the exact place and actions of

the "wall of water on the right and on the left" would be better known after simulating the winds through the mountain passes in conjunction with probable inlet designs.

However, for several reasons, shown later, the scenario described herein is believed to be fairly close to the actual historical events.

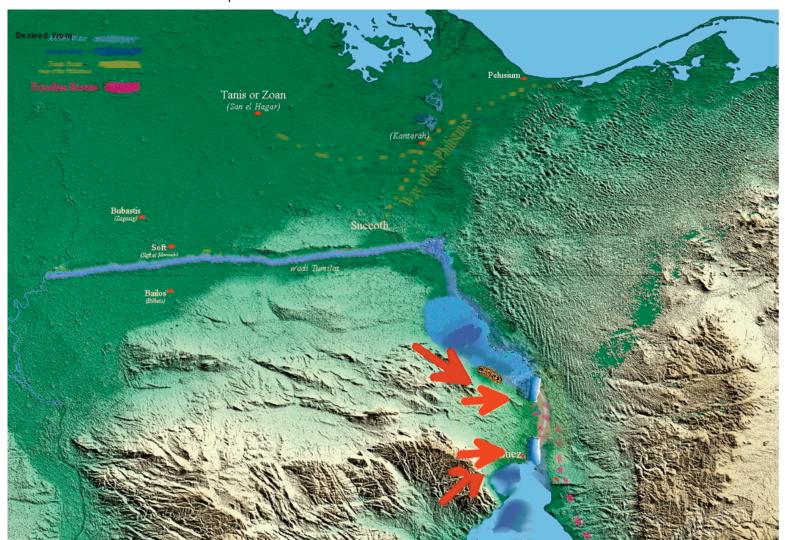


Fig. 20 As the wind speed continues to drop, the farthest storm surges of water, the seiches, continue their travel toward the center while the highest walls of waters nearest the center,on the right and the left of the crossing point, begin to drop also. The Egyptian army (brown oval with light colored spots) is breaking camp and preparing to pursue and re-enslave the Children of Israel.

Wind speeds drop as the last of Moses'es company finish crossing the Red Sea Bow Inlet. It is very early morning light, April 20, 1447 B.C., determined as 4 days after the first Passover of April 16, 1447 BC. (see: Edwin Thiele Exodus doctoral dissertation)

Knowing the place and date it is now possible to calculate the tides and moon and such other regular natural events, although not done herein. Thus we can eventually discover what was happening at what time and the natural phenemon and conditions in effect. We should be able to simulate, fairly closely, the actions of the parting of the Red Sea at the Bow Inlet in the Heroopolite Gulf that dramatically altered world history and man's relationship with the God of heaven and earth at sunrise on April 20, 1447 BC.

The wind has now mostly died, the wall of water has mostly dropped, and this combined with now available light, allows Pharaoh and the Army to pursue the Israelite slaves. The army begins departing the overnight campsite and setting up a charge formation. As the wall of water on the right and left has dropped due to no wind, it has begun to cover the inlet seafloor that was dry when the Israelites

crossed. The army doesn't realize that this is very treacherous clay when wet. They may imagine that Moses and company crossed through shallow water but now the wet clay will soon be a problem. The fact that the army is able to depart and start a charge across the open inlet testifies that the wall of water on right and left has fallen otherwise they would be charging right into a wall of water.

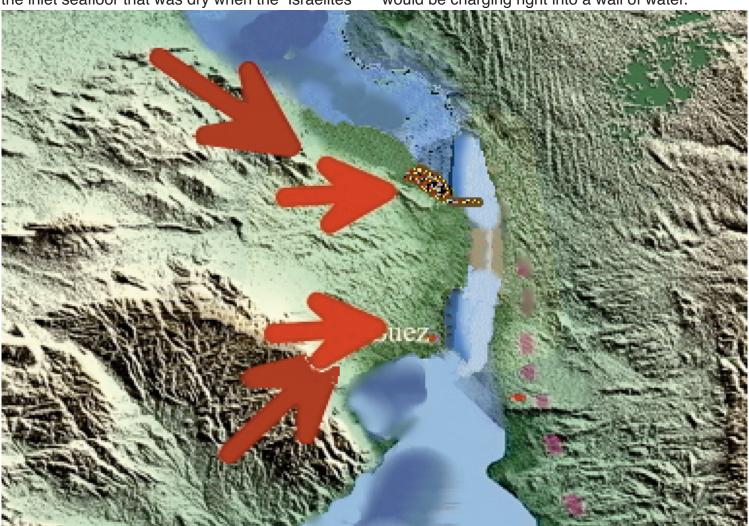


Fig. 21 The Army begins pursuit of Moses and company after being stuck in darkness behind the wall of water all night. The storm surge water seiches are returning from far north and far south.

Due to the Red Sea 'design' of the far north and south bodies of water, the close wall of water which existed overnight had most of the water pulled away from the center of the Bow Inlet into the far north and south Great Bitter Lake and Gulf of Suez regions.

Therefore when the dropping of the highest wall of water on both the right and on the left occurs, there is only enough water available to cover just the very bottom of the Red Sea Heroopolite Gulf Bow

Inlet. Only several inches of water began to cover the seabed of the Bow Inlet and this several inches of water did not present a problem at first.

The large majority returning water is progressing toward the center of the Bow Inlet from the far north, the Great Bitter Lake and far south, the Gulf of Suez. The farthest reaches are about 27 miles away in each direction and there is also a tide involved on the south. The speed of the seiches is fast but slows when it hits shallow inlet sea floors.

The exact nature of the wave return seiches is not known at this writing. Several curious lakebed, seabed, and coastal protrusions to the north and south may have special interesting effects of sloshing waves and cresting timing, but this is beyond the scope of this analysis. Further computer studies might show interesting effects of sideways seiches or rotating tsunamis.

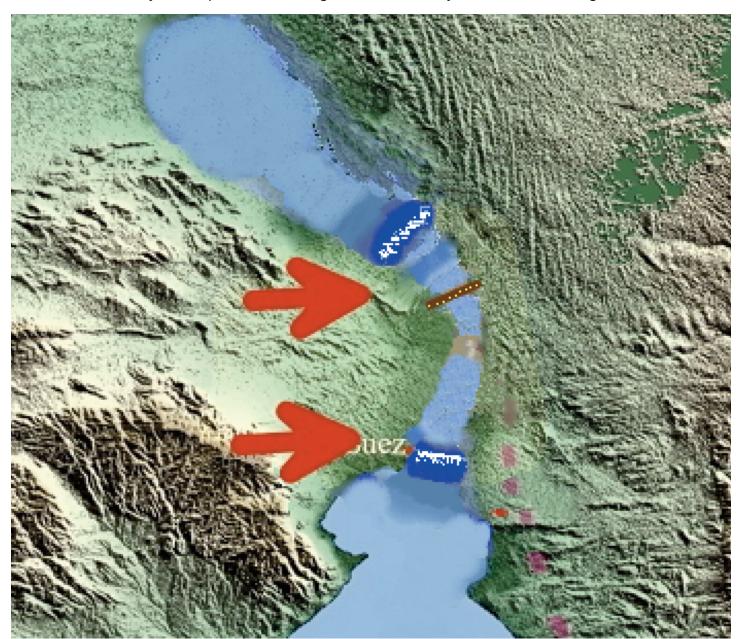


Fig. 22 The army in full charge mode pursues Moses and his company. They are travelling through several inches of water on the clay. Pharaoh sees the slaves ahead in the distance.

A very confident Pharaoh resolves to finally settle all the old issues of Moses'es betrayal, the plagues, the death of the firstborn, the departure, etc. Pharaoh has trained the army for over thirty or fourty years and they are equipped with the latest chariots, bows, and arrows and are very practiced at effective warfare. Moses and Israel have no ability to counter this army.

The approaching seiches or tsunamis from the north and south slow down in the shallower seafloor which also causes the waves to get higher. Meanwhile the coastlines force the waves inward, making them yet again even higher. The exact places and times that the waves crest, or begin to curl and break, is not known and is beyond the scope of this paper.

<u>Exd 14:23</u> And the Egyptians pursued, and went in after them to the midst of the sea, even all Pharaoh's horses, his chariots, and his horsemen.

morning watch the LORD looked unto the host of the Egyptians through the pillar of fire and of the cloud, and troubled the host of the Egyptians.

Exd 14:24 And it came to pass, that in the

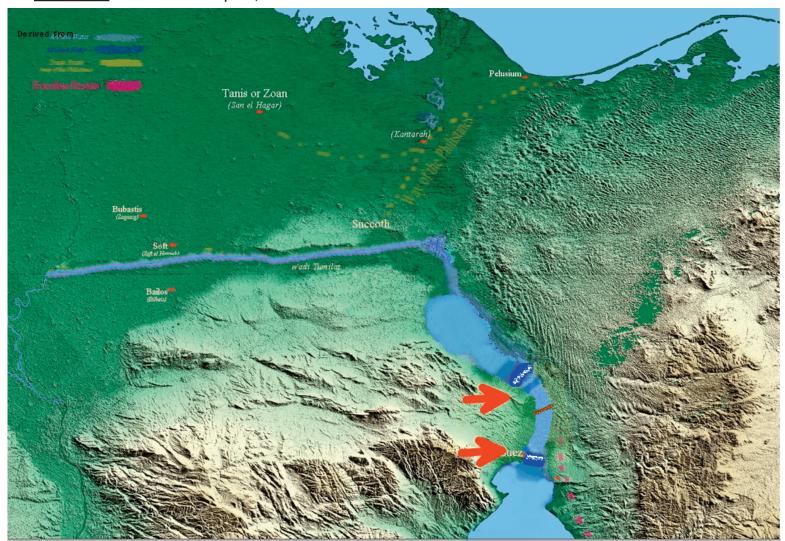


Fig. 23 It takes about 15 - 20 minutes for the army to cover the 4.5 miles from the top of the Bow inlet to the middle. Pharaoh and the army are now charging at full speed down the bow inlet, about 20 mi/hr (32 km/hr) and are almost at the center of the Bow Inlet seeking to recapture the Israelite slaves who just finished crossing the Red Sea. However the clay has returned to it's wet, soft and sticky state and the chariot wheels begin to sink into the soft clay. The two Tsunami swells are closing fast from North and South at possibly 20 - 30 mph.

The Children of Israel travel about 2-3 mph toward an oasis, Uyun Musa, also now sometimes called The Springs of Moses, 14 miles south of the Bow Inlet center.

Exd 14:25 And [the Lord] took off their chariot wheels, that they drave them heavily: so that the Egyptians said, Let us flee from the face of

Israel; for the LORD fighteth for them against the Egyptians.

<u>Exd 14:26</u> And the LORD said unto Moses, Stretch out thine hand over the sea, that the waters may

come again upon the Egyptians, upon their chariots, and upon their horsemen.

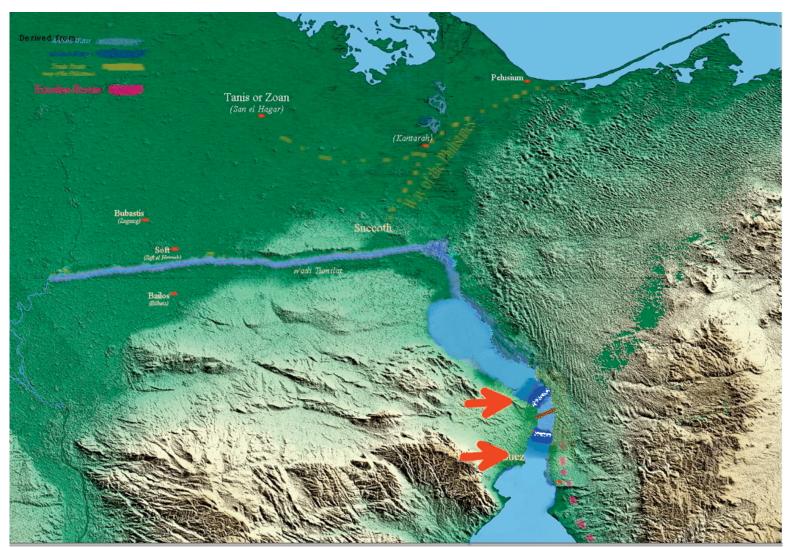


Fig. 24 The Army's chariot wheels become totally stuck in mid charge, in the center of the Bow Inlet. The tsunamis approach from north and south with a speed that may be 30 miles per hour or faster. As the waves or swells pass the Bow Inlet on the north and south they slow from about 60 mph to 30 mph but rise in height. The time for the tsunamis to travel the 5 miles from the Bow Inlet ends to reach the army stuck in the middle at 30 miles per hour =  $(60 \text{ minutes})/(30 \text{ miles})/(30 \text{ miles$ 

The first of the migrating mass multitude has arrived at Uyun Musa and though the water is not good the herds can take a mid day rest in the trees' shade.

Probably Moses has his understudy, the young man Joshua, with him standing and observing everything about 100 ft (33 m) up on the crest of a hillside 9 mi. (14.5 km) south of the Bow Inlet center where the

Exd 14:27 And Moses stretched forth his hand over the sea, and the sea returned to his

Army is stuck in wet clay.

Moses, Joshua, and those Israeiltes not yet over the crest of that same hill are able to look back and see the events of the army, while Moses and Joshua at the crest of the hill are able to look south 4 miles and see the people at the next resting spot, Uyun Musa.

strength when the morning appeared; and the Egyptians fled against it; and the LORD over-threw the Egyptians in the midst of the sea.

Exd 14:28 And the waters returned, and cov-

ered the chariots, and the horsemen, and all the host of Pharaoh that came into the sea after

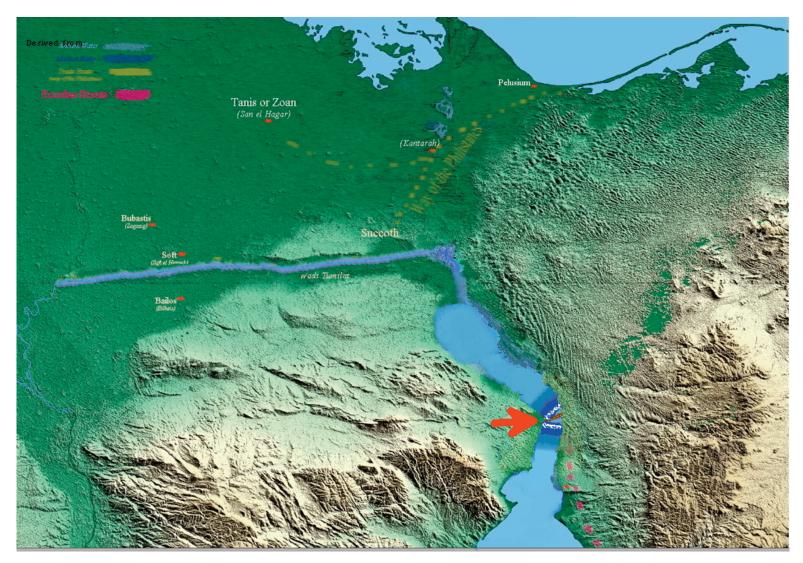


Fig. 25 The Army charges across the 'open' sea but the sea floor now has water on it which is softening the clay as the two tsunamis approach from opposite directions.

them; there remained not so much as one of them.

**Exd 14:29** But the children of Israel walked upon

The two opposing seiche waves return two large volumes of water from the north and south; from the Great and Little Bitter Lakes to the North, and from the small and big bays at the top of the Gulf of Suez to the south.

dry land in the midst of the sea; and the waters were a wall unto them on their right hand, and on their left.

The exact action of the wind on the waters to 'pile up' the waters on the lee or western shores, and the action of the returning seiche waters against the seafloors and shorelines will be very interesting to discover if it is modeled by computer simulations in the future.

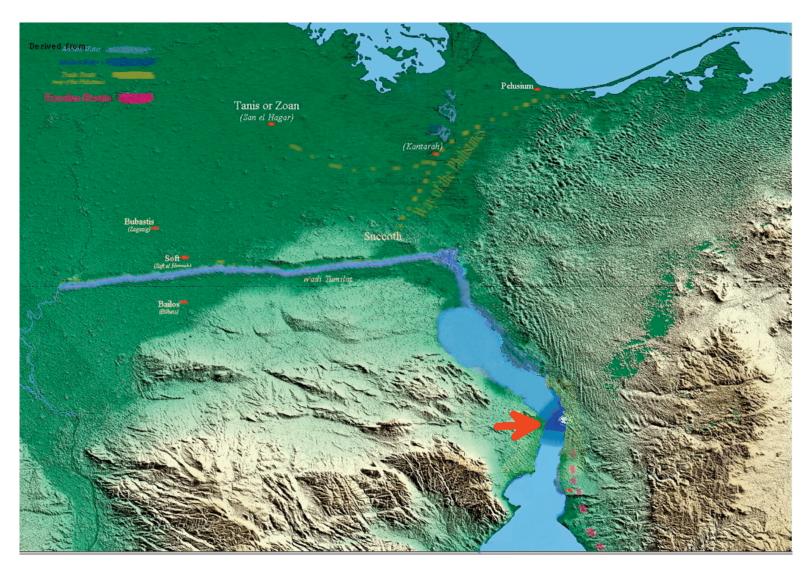


Fig. 26. The final waves (massive dual opposing tsunamis) have a very much greater height and volume than "the waters [that were] a wall on the right and on the left."

These two tsunami waves now approach from the large bodies of water, the Gulf of Suez on the Southwest, and the Bitter Lakes to the Northwest. When they hit the constriction or smaller Bow Inlet portion, as shown in Fig. 21 the only thing the great volumes of water can do is to intensify by increasing in height eventually forming high, cresting waves. Both waves approach from the northwest and southwest with a strong force that includes a strong eastward momentum which is travelling, from north and south, directly toward the high, dried, undercut, sand river bank on the eastern shore.

<u>Exd 14:30</u> Thus the LORD saved Israel that day out of the hand of the Egyptians; and Israel saw the Egyptians dead upon the sea shore.

**Exd 14:31** And Israel saw that great work which the LORD did upon the Egyptians: and the people feared the LORD, and believed the LORD, and his servant Moses.

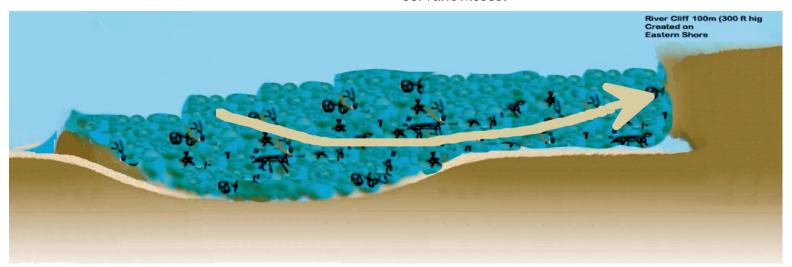


Fig. 27 All the forces and volumes of the two massive opposing tsunamis combine as they collide from the northwest and southwest, smacking against the high sand river bank to the east.

Fig. 27 Waters' high force from northwest & southwest hits undercut high sand bank on east shore.

As the two tsunamis go toward the center of the Bow Inlet they also run uphill on the bottom, increasing in height. Now traveling with great force and velocity they posess all the energy that the wind has put into them throughout the whole night. They have so great a volume of water and so much force that when the two northwest and southwest arms meet the combined tsunamis not only double in size, but crest very violently and very high.

When the two tsunamis going southeast and northeast hit together the north and south momentum or vectors cancel and only the east vector force remains, but it's force is now doubled. This doubled force makes a very large eastward tsunami with great power going toward the undercut High Sand River Bank. It goes possibly two or three miles inland and meets the high sand river bank which was undercut by the water when the locusts were blown out of Egypt. The army is very greatly overwhelmed.

The final, single, combined, large wave tsunami has such great volume, energy, and force that it hits the high, dry, undercut, sand river bank with a smack, shaking it. And the force with which it hits is from the bottom up, an uplifting force, breaking the solid sandbank overhang at the weakest point of the greatest mass.

And the undercut, high sand river bank falls and slides into the water and onto the drowned, stuck, army. As Exodus 15:12 says: "11 Who is like unto thee, O LORD, among the gods? who is like thee, glorious in holiness, fearful in praises, doing wonders? Thou strechedest out thy right hand, the earth swallowed them."

THE ANSWER to the Page 24 contradiction of: is it on-the-shore or at-the-bottom is both. The volume of the water from the two colliding tsunamis was so great that it very completely overwhelmed the army and they sank to the bottom, which was the shore or the normal sea, wherever they were at the center of the Bow Inlet. The height of the water was so very far over their heads that they drowned and fell to the bottom, the shore, and under the collapsing sand river bank.

New evidence shown below indicates that the army actually stretched all the way across the Bow Inlet for about 9.32 miles (15 km). The spread of the army's charge from front to back is about 300 meters (984 ft).

It is incredible evidence and verifies the Bible's written history.

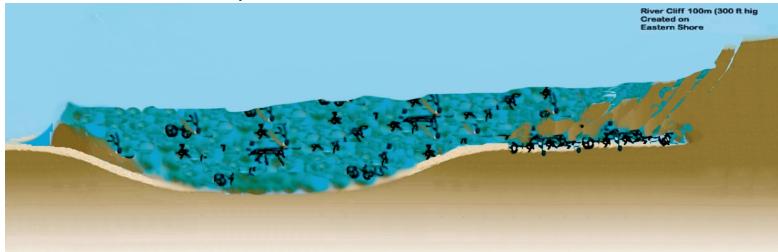


Fig. 28 Bow Inlet as full force of Waters hits undercut High Sand River Bank swallows the army.

### The high sand river bank collapses.

<u>Exd 15:11</u> Who [is] like unto thee, O LORD, among the gods? who [is] like thee, glorious in holiness, fearful [in] praises, doing wonders?

Exd 15:12 Thou stretchedst out thy right hand, the earth swallowed them.

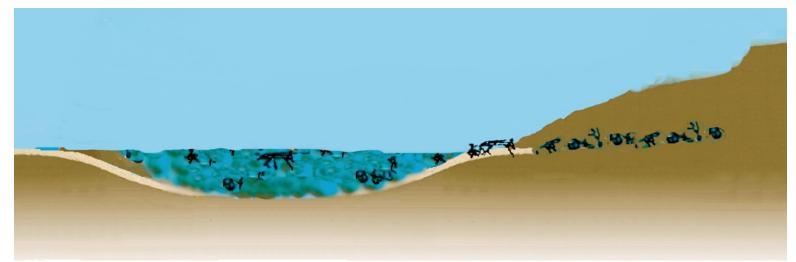
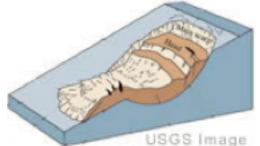


Fig. 29 Bow Inlet Center Section in the morning after army is washed up on the shore of Sand River Bank and Israelites gather weapons from army on the shore.

<u>Exd 14:30</u> Thus the LORD saved Israel that day out of the hand of the Egyptians; and Israel saw the Egyptians dead upon the sea shore.

Fig. 30 Undercut river banks, and river bank collapses are not unusual but are common for rivers and inlets. The image shows an earth collapse and flow called a 'TOE' (a geomorphology term). The Exodus Bow does have such a remnant geographic feature on the center east shore of the Bow Inlet. This loosened sand allowed for crescent dunes only on the surface where the sand was loosened.



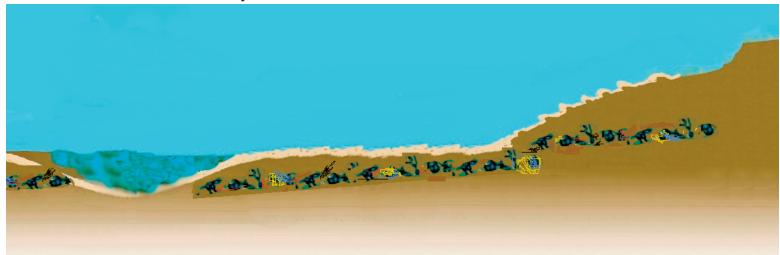


Fig. 31 Bow Inlet Center Section after the river bank sand filled in the Bow Inlet waterway and a new Suez Canal was dug a few miles to the West. Crescent dunes can form only on the loosened sand. The army colors indicate materials of copper weapons, gold/silver covered chariots, iron, etc.

By crafting the seas, lakes, mountains and passes, by using the mighty strong west wind to clear the Locusts out of Egypt, the high sand river bank was undercut several miles inland. For the tsunamis to reach the high sand river bank required a grand design and great force of volume to greatly submerge the army and for the large clashing tsunamis to go sideways several miles inland to blast against the sand river bank to bury the army under the collapsing river bank. Why did God go to all the trouble of the plagues and wonders and crafting of mountains, lakes and seas?

- 1. The buried army is now several miles inland under a high sand river bank which nobody will disturb unless they have a very good reason, like to verify that this is all true. This verifies that the Bible is true and that God is real.
- 2. Burying the army in sand forces out all the oxygen and the very dry environment mummifies the army, horses chariots and weapons to be available to be excavated.
- 3. Covering the army with a collapsed sand river bank adds credibility to the sea parting site by the loose sand design.
  - a. Except for the collapsed sand, the other ridge sand is old, compressed, packed sand that has been there for millenia
  - b. When wind blows against the old, unmoved sand grains it is very difficult to move them. They have settled and been compacted for thousands of years, except the area where the sand river bank has collapsed onto the army.
  - c. Only the sand loosened especially well the one area can the wind can blow into recognizable crescent dunes.
  - d. The special arc and toe pattern of the crescent dunes is part of the key to identifying the site as the place where the high sand river bank collapsed and then the sand continued to run toward the Bow Inlet area in the west, thus making a unique crescent and toe design.
  - e. Below, Fig. 32, US government maps show the Bow Inlet area as it appears today, with the crescent dunes identified where the high sand river bank collapsed and buried the army. Topography altitude lines are in meters.
  - f. Small sand particles stick together. Sand is silica, which when heated enough melts together into glass. Sand with enough heat, pressure, and time, forms sandstone. Old, compacted sand grains actually begin to weld themselves together. As they push together for long enough the crystals melt together. So when the sand is loosened it is easily blown by the wind to form large crescent dunes only in the area where it is loosened.
- 4. That the Lord would be glorified and respected that people would hear the truth so as to be blessed, and not cursed.
- 5. But by far the most important reason that God did all the Exodus wonders and is bringing it out now is so that people would see the coming destructions in the Book of Revelation and save themselves from misery, torture, torment, death and hell. And this is why the details of the upcoming "plagues" in the Book of Revelation is the last part of this book. In a day when man respects science and nature but not God, God will show everyone that he is the God of heaven and earth, the God of science and nature; and all the people will know that he is the Lord, the Almighty God.

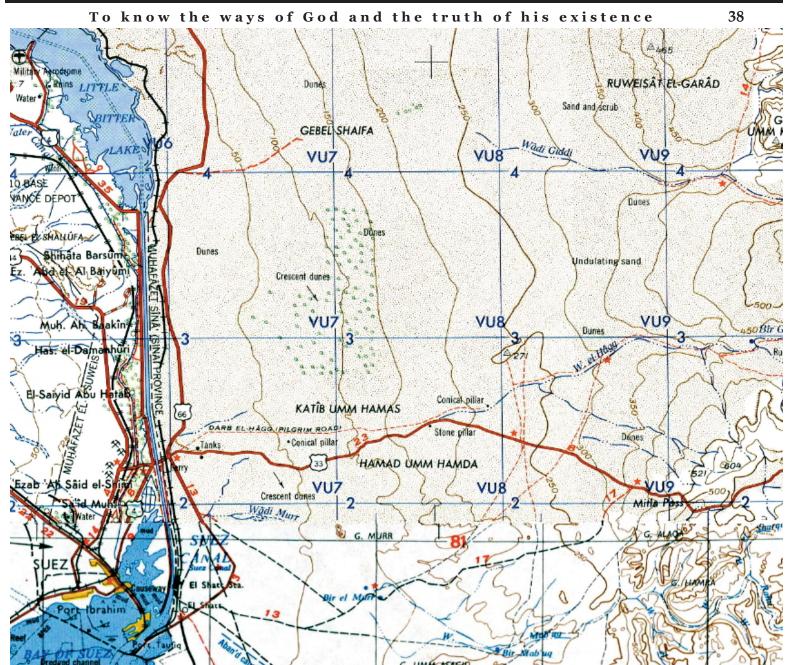


Fig. 32 A modern map of the Bow Inlet area shows Crescent Dunes at VU7-3 and VU7-2 locations.

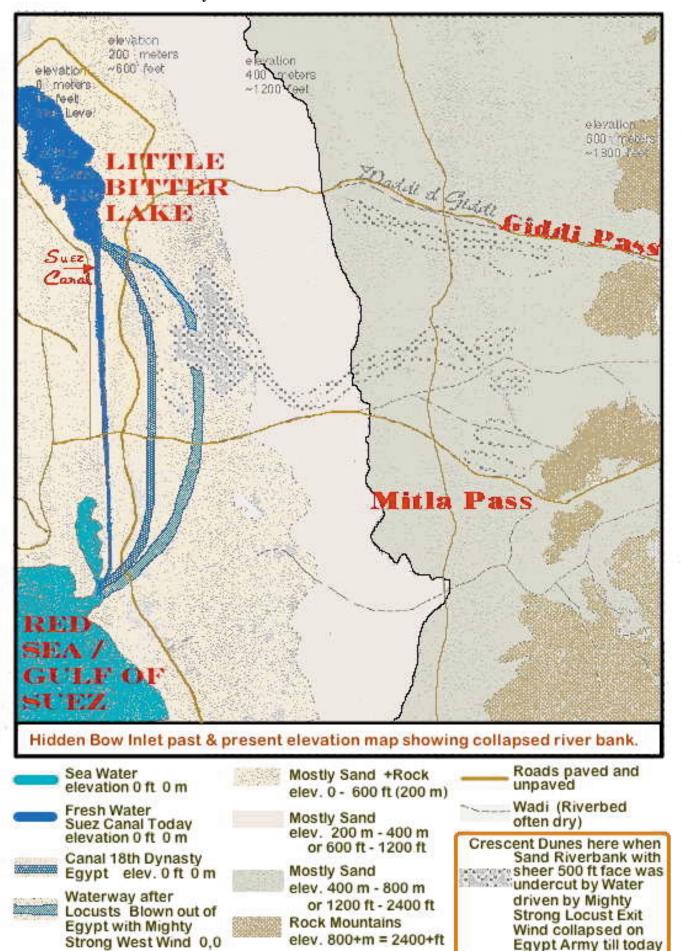
At VU7-2 in Fig. 32 "Crescent dunes" are identified by green dots. The Crescent dunes are shown on most topographic maps of the Bow Inlet area having good detail and scale.

The vertical (north south) Crescent dune 'arc' identifies the arc where the high sand river bank was undercut. The horizontal, westward, or left flowing 'toe' was the front peak of the sand river bank that collapsed first and flowed the farthest westward. This classic 'Toe' (Fig. 30 & 32) is named in geomorphology (study of earth geography

changes, especially from wind and water). Brown elevation lines in Fig. 32 show 50 meters (150 ft) altitude increments above sea level.

Notice also that the Crescent dunes area where the High Sand River Bank collapsed is just between the Giddi Pass on the upper right and the Mitla Pass on the lower right. The Giddi Pass is just directly east of the beginning of the bow at the southern end of Little Bitter Lake. The Mitla Pass is also just directly east of the beginning of the Bow Inlet on the south at the top of the Bay of Suez.

Fig. 33 next page, is a Bow Inlet map showing possible canals, elevations, crescent dunes with 'TOE'.



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Fig. 34 Bow Inlet Center Section today with the present Suez Canal on the left, and Crescent Dunes where sand was loosened over Buried Army and Land Mines under sand which are said to have been removed

In the last several years millions of land mines are said to have been removed from the area east of the southern Suez Canal where they were supposedly protecting Egypt from Israel. Can you be sure they have all been removed?

### Old land mines?! Recommendation: Stay in vehicle, off the sand, out of the area!

**CONCLUSION:** All the Exodus wonders, the Red Sea Crossing and the apparent crafting of the Bow Inlet were originated and orchestrated by God and obviously perfect, functional, and correct. The understanding, interpretation, and presentation herein is but a hopefully inspired yet albeit limited human attempt to transmit that incredible design and activation to the people of the world.

There may be errors in description, function, or quantities which can be determined by further research, computer simulations, or new evidence. Computer simulations or physical models may better disclose the Bow Inlet Red Sea opening and closing mechanism.

The exact design, dimensions, and operation are no doubt different than what has been described. But the description herein is expected to be close enough for understanding and verification by exterior satellite and radar probing and is close enough for computer simulation and for archaeological planning.

The whole Exodus event and the parting of the Red Sea took place about 3500 years ago. The parting of the Red Sea is certainly a miracle and it has been expressed that the expected actual way it happened in the Bow Inlet is an even greater miracle than the simple magic parallel walls of water.

Three thousand five hundred years ago God produced the miracle of the parting the Red Sea and inspired Moses to write the detailed record in scripture which would eventually guide today's generation to the evidence which should now uncover the proof. It is one thing for God to do a miracle. It is quite another thing for God to prove he did a miracle 3500 years afterward. It is not only the proof of the Exodus but also the proof of God. And it is also proof of the 'Logos,' the Word. It is God's proof of himself.

All Praise and Glory be to God. Offered for consideration and investigation.

Jonathan Novak

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Note: Pages 33, 34, 35 Are incomplete.

# Number of People, & Area Required

The Bible says the number of creatures in the Exodus was 600,000 People plus children, very much cattle and flocks and herds and a mixed multitude.

### Exd 12:37

And the children of Israel journeyed from Rameses to Succoth, about six hundred thousand on foot [that were] men, beside children.

### Exd 12:38

And a mixed multitude went up also with them; and flocks, and herds, [even] very much cattle.

If 600,000 are men and women adults, then estimate that children are 4 per family on average which means there are 6 per family rather than 2 adults so that this triples the size of the family or the population. Therefore,  $600,000 \times 3 = 1.8 \text{ Million Israeli's}$ .

Estimate 6 animals (cattle, sheep, goats) per family so number of creatures doubles again, or, 1.8 Mil X 2 = 3.6 Mil Creatures.

If each creature has 3 ft. X 3.33 ft. space, then 3 x 3.3333 = 10 sq. ft per creature. So using the number of creatures estimated above - 3.6 Mil Creatures X 10 sq. ft per creature = 36 Mil Ft. Sq.



Fig. 35 Pi Hahiroth area with space for Millions of Exodus creatures.

36 Mil Sq. Ft. (to hold 3.6 Million creatures) = 1.29 Sq. Miles. - a square 1.3 miles x 1.3 miles on each side.

If we underestimated and the children and creatures were 4 times as much (4 x 3.6 Mil. = 14.4 Mil.){the cattle here might be as much as 8 Million cattle} then:

Let's say 1.3 sq. mi. X 4 = 5.2 square miles of creatures.

A square 5.2 miles on a side can thus hold about 15 million creatures - people, cattle, flocks and herds. Thirty (30) Million would be twice as much or twice the size, still within the capability to be held in the area.

Important remaining Questions:

- Q. What was height of "Chowmah", wall of waters on right and on left.
- A. Water height would be dictated by wind velocity and depth of seabed floor below river bank sides. The maximum height of the 'wall' of water in the Bow Inlet could not be higher than the containing borders which would be the river banks of the inlet. A wall which would be a "impenetrable" border or high "wall" one would think would be at least higher than the people. So it should be at least eight to ten feet high. The canal or "Bow Inlet" sea floor was probably at least that deep.

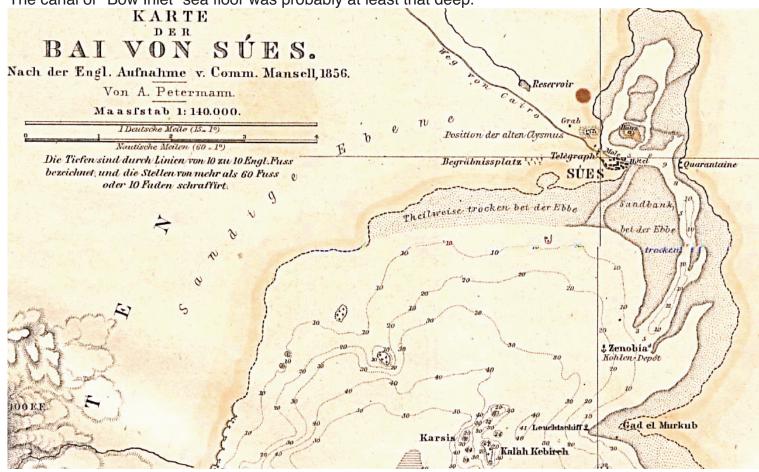


Fig. 36. An 1856, pre Suez Canal, map of the very north eastern Bay of Suez / southernmost point of the Bow Inlet shows depths of 10 "Fuss" (German for Foot") in an inlet channel south east of the city of Suez.

Q. What was the width contours of the Bow Inlet? The side heights would change with tides and water volume so it is time and circumstance dependent.

Q. What are more exact sizes, directions, (vectors) and timing of the Strom Surges and Seiches?

Q.

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### To know the ways of God and the truth of his existence

43tf

Q. Did the Nile connect with the Gulf of Suez via the Wadi Tumilat, Lake Timsah, Bitter Lakes & Bow Inlet.

A. Hatshepsut, a probable Pharaoh during the Exodus, took a famous expedition to Punt on the African coast. She wanted to re-establish Egypt as a trading nation. Her funerary temple at Deir El Bahari has painted wall carvings of the expedition showing the ships in the Nile River and in the land of Punt being loaded with exotic goods where they were returned to Egypt, mostly back to the Nile River. Fish specific to the Nile and the African Coast are shown with the identical ships. It is generally acknowledged that these are the same ships shown in the Nile River and in the land of Punt. Some suggest that the 5 ships were constructed and sailed in the Nile River, then disassembled and taken overland on donkeys to Quseir where they were reassembled. Quseir is an old port on the Red Sea Gulf of Suez near Thebes in upper Egypt. Earlier Pharaohs had build seagoing ships there. Why disassemble the ships back and forth? Why not just keep using the ships in the Gulf of Suez and off the Africa Coast? Why not just build the ships in Quseir to begin with, as earlier Pharaohs had done, and leave them off the African Coast? It is a lot of work to build a 60 ft ship and make it strong and light and water tight. And 5 ships is 5 times the work. Why do it two or three times? Why do 10 or 15 times the work. This makes no sense.

Historians Herodotus, Pliny, Strabo say that the Gulf of Suez extended up via a thin strip of water to the Egyptian City of Heroes, "Heroopolis" (Pithom?). This was called the Heroopolite Gulf, a northern extension of the Gulf of Suez going to Heroopolis, an eastern point on the Wadi Tumilat, near the top of the Red Sea.

There was a canal called "The Canal of the Pharaoh's" which went from the Nile River to the Red Sea above the Bitter Lakes and essentially connected the Gulf of Suez with the Nile River, and by extension with the Mediterranean Sea. Darius the Mede, Pharaoh Necho, and Napoleon all considered digging or re-digging this canal and some quit working on it mistakenly thinking the Red Sea was higher in water level than the Nile River. (They worried that the Gulf of Suez, Red Sea, salt water would run into the Nile River and would make the Nile River salty and ruin all Egyptian life.) This is a mistake because, as we know today, the present Suez Canal uses no locks and allows water to flow from the Mediterranean to the Gulf of Suez and back. But the Nile River is slightly higher in altitude than both the Mediterranean and the Gulf of Suez so the Nile flows out into the Mediterranean.

Joseph and the Israelites were canal builders and worked waterways. See the Canal of Joseph in the Fayum: http://hope-of-israel.org/josepheg.htm

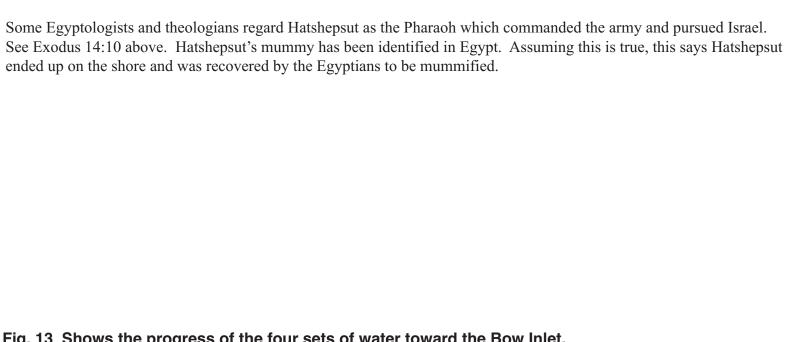
Eighty-one miles S.S.W. of Cairo by rail, lies Medinet-el-Fayum

More references to be supplied.

Q. What was the Exodus Route after crossing the Red Sea at the Exodus Bow Inlet?

A. The Bible says they were to go by way of the Red Sea. Some modern natural evidence agrees with this. Satellite infrared photographs indicate a very large group of people and or animals compacted the earth in a route around the Sinai Peninsula; a route that followed the border of the Sinai Peninsula along side the Red Sea. This is also matched by archaeological evidence of large campsites along this route.

Interestingly, recent satellite infrared technology has revealed ancient caravan routes in the Sinai. George Stephen, a satellite-image analyst, discovered evidence in the satellite photographs of ancient tracks made by "a massive number of people" going "from the Nile Delta straight south along the east bank of the Gulf of Suez and around the tip of the Sinai Peninsula." He also saw huge campsites along the route, one that fits the description given in the book of Exodus (Price 1997:137)



### Fig. 13 Shows the progress of the four sets of water toward the Bow Inlet.

The high wall of waters (that Moses and Israel passed through) which are just at the edge of the dried out crossing begin to return and flood first, as has been shown.

When those waters hit together there is somewhat of a back wave which tends to go back towards the Bitter Lakes to the North, and toward the Gulf of Suez to the South.

As the waters from the main wall of waters hit together and form the back wave they hit the next set of incoming waters from the Little Bitter Lake and from the top semicircular curved area just in front of the high mountain which Moses calls Migdol.

This is what appears to be occurring, but the exact timing and strength and sequence will have to be determined by further research and modeling, and simulations.

Greater volumes of waters have congealed in the hearts of the deep at the western sides of the Great Bitter Lake and the Gulf of Suez. When the wind dies for these second waters they also begin to return as tsunami waves from two directions toward the center of the Bow Inlet.

This is a figure or type of Jesus as the Lamb who shed his blood on the cross to provide forgiveness for sins to save those who believe on him, follow him, and take him as Lord and Savior. Now here is a question for you the reader. Won't you come to Jesus as Lord and Savior and be saved from eternal Hell right now. Take a minute and pray to Jesus, confess that you are a sinner, (it's not news, we're all sinners), confess that you are a sinner, and ask him for forgiveness and to be saved from hell. This is the only way to get salvation from Hell. One can't imagine how terrible it is. We all have sinned and done bad things and Jesus is ready to take you to be his own. Please pray right now and be saved by Jesus and follow Jesus and the truth.

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### References - End Notes:

Page 28 April 16 1447 B.C. First Passover with Eclipse. Well Documented: https://groups.yahoo.com/neo/groups/BibleProphecy/conversations/topics/31464 Which itself references the doctoral dissertation of Thiele.