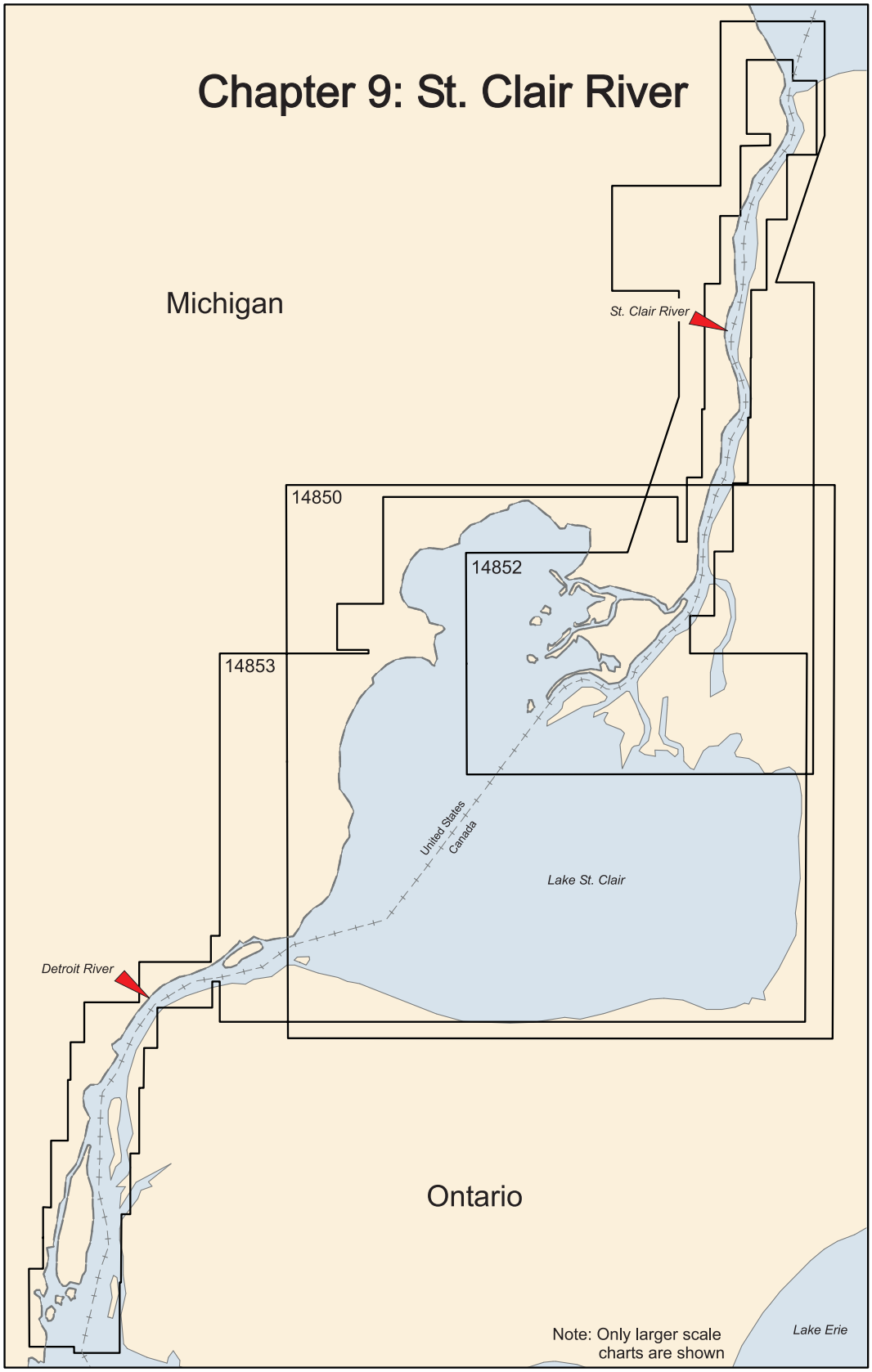
Chapter 9: St. Clair River
Michigan
St. Clair River
14850
14852
14853
United States
Canada
Lake St. Clair
Detroit River
Ontario
Note: Only larger scale
charts are shown
Lake Erie

St. Clair River

Chart Datum, St. Clair River

(1) Depths and vertical clearances under overhead cables and bridges given in this chapter are referred to the sloping surface of the river corresponding to a Lake Huron stage of 577.5 feet (176.0 meters) and a Lake St. Clair stage of 572.3 feet (174.4 meters) above mean water level at Rimouski, Quebec, on International Great Lakes Datum 1985 (IGLD 1985), which elevations are the planes of Low Water Datum for the two lakes. (See Chart Datum, Great Lakes System, indexed as such, chapter 1.)

General description

(2) **St. Clair River** is about 39 miles long from Lake St. Clair via St. Clair Cutoff Channel and South Channel to the head of the river at Lake Huron. The lower 11 miles of the river is a broad delta through which numerous channels flow into Lake St. Clair. St. Clair Cutoff Channel and South Channel form the main navigation route through the delta and connect with the dredged channel across Lake St. Clair. The upper river, above Chenal Ecarte, is generally a single deep channel, except where obstructed by Fawn Island and Stag Island. The banks of the river are clay and sand and usually quite steep.

Canadian Waters

(3) St. Clair Flats Canal is immediately W of the **International Boundary**, i.e., is in U.S. waters. At the lower end of South Channel, the **International Boundary** is almost centerline of the channel and when proceeding upstream the Boundary stays approximately centerline the full length of the St. Clair River to its head at Lake Huron.

Channels

(4) The channel through St. Clair River has been improved in places by dredging. The Federal project depth in the river is 27 feet.

Dangers

(5) In October 1999, a sunken wreck, covered 28 feet, was reported in the St. Clair River about 350 feet E of Fort Gratiot Range Front Light in about 42°59'36"N., 82°25'34"W.

Fluctuations of water level

(6) Each year the St. Clair River has a seasonal rise and fall of about 1 foot, generally in consonance with the seasonal variations of Lake Huron. High winds may cause rapid fluctuations of up to 2 feet above or below normal.

Currents, St. Clair River

(7) The following currents are based on averages of water flow through the entire cross section of the river, that is from bank to bank and from the surface to the bottom during normal flow conditions. Normal water flow conditions are encountered when there is no wind, Lake Huron is at a stage of 578.9 feet (176.4 meters), and Lake St. Clair is at a stage of 573.9 feet (174.9 meters) above mean water level at Rimouski, Quebec, on International Great Lakes Datum 1985 (IGLD 1985), that is 1.4 feet (0.4 meter) and 1.6 feet (0.5 meter above their respective Low Water Datums. The current encountered at midstream is usually about 1.5 times the average velocity. Greater velocities may be expected when the difference between the lake levels is greater, or the lake stages are higher.

(8) Currents for the following locations in the St. Clair River are given at high water flow of 230,000 cubic feet per second (cfs), medium water flow of 188,000 cfs, and low water flow of 130,000 cfs, respectively.

(9) Algonac: 2.0 mph (1.7 knots), 1.6 mph (1.4 knots), and 1.3 mph (1.1 knots)

(10) Port Lambton: 2.0 mph (1.8 knots), 1.7 mph (1.5 knots), and 1.3 mph (1.1 knots)

(11) Marine City: 2.0 mph (1.7 knots), 1.6 mph (1.4 knots), and 1.3 mph (1.1 knots)

(12) St. Clair: 2.1 mph (1.9 knots), 1.8 mph (1.5 knots), and 1.4 mph (1.2 knots)

(13) Marysville: 1.9 mph (1.7 knots), 1.6 mph (1.4 knots), and 1.3 mph (1.1 knots)

(14) Point Edward: 3.9 mph (3.4 knots), 3.3 mph (2.9 knots), and 2.5 mph (2.2 knots).

(15) The rapids section extends from about 1,000 feet above to 200 or 300 feet below the Blue Water Bridge. During periods of sustained high N to NE winds on Lake Huron, velocities in the upper St. Clair River are increased.

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Ice

(16) The only need for icebreaking in the St. Clair River occurs when the ice bridge that forms across the S end of Lake Huron breaks and the broken mass of ice travels down the river to the lower end where it meets the natural ice cover and forms a massive ice jam. When this occurs, ice can clog the entire 27-foot depth of the channel and cause serious flooding. (See Winter Navigation, chapter 3.)

Navigation regulations

(17) The State of Michigan enforces the following speed limits for recreational craft within its jurisdictional boundaries from the mouth of Black River downstream to the mouth of St. Clair River: slow-no wake for vessels less than 26 feet long within 200 feet of any shore, dock, or pierhead, and slow-no wake for vessels 26 feet or longer within 600 feet of any shore, dock, or pierhead.

(18) A vessel traffic reporting system and related navigation regulations have been established for the connecting waters from Lake Erie to Lake Huron. (See **33 CFR 162.130 through 162.140,** chapter 2, for regulations.)

Pilotage

(19) The waters of St. Clair River are Great Lakes designated waters; registered vessels of the United States and foreign vessels are required to have in their service a United States or Canadian registered pilot. Registered pilots for St. Clair River are supplied by Lakes Pilots Association. (See appendix for address.) Pilot exchange points are just below the Ambassador Bridge in Detroit River and off Port Huron at the head of St. Clair River in about 43°05'30"N., 82°24'42"W. The pilot boat in Detroit River, J.W. WESTCOTT II, has a black hull encircled by an orange band and a white cabin with the words "U.S. Mail" in black letters. Three pilot boats are at Port Huron: HURON BELLE has an international orange hull with an aluminum cabin, and HURON MAID and HURON LADY each have an international orange hull with a white cabin. (See Pilotage, chapter 3, and **46 CFR 401,** chapter 2.)

Charts 14850, 14852, 14853

(20) **St. Clair River** flows S from Lake Huron and empties into the NE side of Lake St. Clair. The mouth of the river is an extensive delta providing numerous outlets into the lake.

(21) The following is extracted (partial) from **Canadian Sailing Directions CEN304, Chapter 3, St. Clair River**. It is to be noted that the units of miles are nautical miles.

(22) ***Chenal Ecarte*** *(also known as* ***The Snye****), branches eastwards from St..Clair River at* ***Baby Point*** *(42°38'N., 82°30'W.), 1.8 miles NNE of Russell Island. The main route to* ***Wallaceburg*** *is via Chenal Ecarte and* ***Sydenham River****, which flows into Chenal Ecarte 6 miles SE of Baby Point. Consult the appropriate local authority, which is the Base Manager, Canadian Coast Guard Base, Amherstburg, Ontario, for the latest depth information.*

(23) *The Boating Restriction Regulations provide a speed limit of 8 km/h (4.3 knots) on Chenal Ecarte and Sydenham River as far as Dresden, which is 10 miles east of Wallaceburg. This speed limit reduces wake damage to dykes and low farmland.*

(24) *The current in Chenal Ecarte sets east and south from St. Clair River to Lake St. Clair. Rates of up to 1.2 knots have been reported in Chenal Ecarte where it leaves St. Clair River.*

(25) *Chenal Ecarte range lights, in line bearing* ***138.5°****, are on the south shore of Chenal Ecarte near its junction with St. Clair River. The front light (746) is shown from a white circular tower, 12 feet (3.7 m) high, with a fluorescent-orange triangular daymark with a black vertical stripe. The rear light (747) is shown from a white circular tower, 26 feet (7.9 m) high, with a fluorescent-orange triangular daymark with a black vertical stripe. The lights are visible only on the range.*

(26) *There are twelve daybeacons from 1 mile inside the north entrance of Chenal Ecarte to the Sydenham River junction; eight of these are starboard hand and four port hand. Most of these daybeacons mark turns in the channel.*

(27) *There are facilities for small craft on the north side of Chenal Ecarte, 0.4 mile east of the junction with St. Clair River.*

(28) *St. Clair Boating and Marine had depths of 6 feet (1.8 m) in 1994 and offered dockage with power and water, pump out, ramp, boat hardware, repairs and salvage, 20 tonne hydraulic trailer, new and used boat and motor sales and service, water taxi service, picnic area, pay phone and showers.*

(29) *Ecarte Marine had depths of 6 feet (1.8 m) in 1994 and offered dockage with power and water, pump out, ramp, repairs and salvage, 20 tonne hoist, mast stepper, new and used boat and motor sales and service, water taxi service, picnic area, pay phone, showers, laundromat, boat hardware, ice and gasoline, and monitored VHF Channel 68.*

(30) *The swing bridge on Chenal Ecarte at Walpole Island village is operated by the Department of Indian Affairs and Northern Development. The bridge has a vertical clearance in a closed position of 14 feet (4.3 m); the channel leads each side of the central pier.*

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(31) *Two submerged cables cross Chenal Ecarte 0.15 mile NW of the swing bridge; there are other submerged power cables near the bridge.*

(32) *A water tower 0.8 mile WSW of the swing bridge is painted blue and has an elevation of 164 feet (50 m).*

(33) *At a point 5 miles from the St. Clair River end of Chenal Ecarte,* ***Johnston Channel*** *flows south, winding and narrow, for 11.5 miles to the marshy flats of Lake St. Clair.*

(34) *The Boating Restriction Regulations provide a speed limit of 8 km/h (4.3 knots) on Johnston Channel from 42°34'N. to its junction with Chenal Ecarte.*

(35) *The marshy land lying east of Johnston Channel is* ***St. Anne Island****; this is an Indian reserve.*

(36) *The distance from St. Clair River to* ***Sydenham River*** *(42°34'N., 82°25'W.) by Chenal Ecarte is 8.5 miles. From this point, Chenal Ecarte winds southward for 8 miles to its Lake St. Clair outlet at* ***Martin Island*** *in Mitchells Bay.*

(37) ***Caution****.–Two cable ferries on Chenal Ecarte carry farm produce and farm vehicles; one is 1.2 miles NW of the Sydenham River junction, and the other is 1.7 miles south of the junction. To avoid striking the submerged cables, vessels are cautioned to keep well clear of the ferry when it is in transit.*

(38) *Blue Water Shiloh Park, on Chenal Ecarte 1 mile NW of the junction with Sydenham River, had depths of 2 to 7 feet (0.6 to 2.1 m) in 1994 and offered dockage, ramp, canoe rentals, tent and trailer camping, picnic area, pay phone, drinking water, showers, laundromat, ice and snack bar.*

(39) *An overhead power cable with a clearance of 20 feet (6.1 m) is reported to cross Chenal Ecarte 1.5 miles below the junction with Sydenham River.*

(40) *There is a conspicuous microwave tower 0.8 mile NNW of the Chenal Ecarte junction; it is a red and white skeleton tower, 262 feet (79.9 m) high and elevation 308 feet (94 m), with air obstruction lights.*

(41) *A submerged pipeline crosses* ***Sydenham River*** *0.7 mile NE of the Chenal Ecarte junction.*

(42) *A Public wharf on the NW shore of Sydenham river, 1.2 miles NE of the Chenal Ecarte junction, is 134 feet (40.8 m) long with an elevation of 9 feet (2.6 m). In 1994, the wharf had a least depth of 10 feet (3 m) and was in a state of disrepair, with a group of piles 3 feet dry (0.9 m dry) at the south outer corner and piles awash at the north outer corner. There are no facilities at the wharf, and the land adjacent to it is overgrown (1994). There is a turning basin close upstream of the wharf.*

(43) *The Seys Grain Elevator berth is on the SE shore, opposite the Public wharf. This berth is 450 feet (137.2 m) long and consists of a 6 wooden dolphins with elevations of 13 feet (4 m); there were depths of 13 to 18 feet (4 to 5.5 m) in 1994, and it was reported that no ships had used the berth in recent years.*

(44) *The town of* ***Wallaceburg****, with a population of 11,846 (1991), is on Sydenham River 2.3 miles NE of the Chenal Ecarte junction. The river at Wallaceburg is 200 feet (61 m) wide.*

(45) *A CSX Transportation railway swing bridge crosses the river at Wallaceburg; there is a width of 50 feet (15.2 m) between the channel piers. This bridge remains open except when closed for railroad traffic. A pedestrian lift-bridge crosses the river 0.5 mile north of the railway bridge. The Lord Selkirk highway swing bridge lies between the railway bridge and the pedestrian bridge. There is a swing bridge for highway traffic at Libby Street and Baseline Road, 0.5 mile downstream of the railway bridge; its opening schedule is planned to coincide with that of the Lord Selkirk bridge.*

(46) *There is a berthing area and slip on the SE shore upstream of the Libby Street and Baseline Road swing bridge. In 1996, this slip was being developed as a marina and was reported to have depths of 3 to 4 feet (0.9 to 1.2 m).*

(47) *Wallaceburg is a* ***Customs vessel reporting station*** *for pleasure craft.*

(48) *Wallaceburg Municipal Marina offered overnight dockage at 8 locations in downtown Wallaceburg in 1994; most of these wharves are on the NW shore between the Lord Selkirk bridge and the pedestrian bridge, with depths, at the James Street wharf, of 4 to 14 feet (1.2 to 4.3 m). Power at the docks, showers, ice, and picnic areas with barbecues were also available. All the facilities of the town are within walking distance.*

(49) *There is a launching ramp on the SE shore at the foot of Wallace Street and Huron Street.*

(50) **St. Clair Cutoff Channel**, the main vessel route through the St. Clair River delta, extends ENE from the N end of Lake St. Clair ship channel for about 6 miles between **Seaway Island** and Bassett Island to its junction with South Channel at the SE end of Harsens Island. The channel is maintained by the Canadian Government and is well marked by lighted and unlighted buoys, lights, and a **064°15'** lighted range on Squirrel Island.

(51) Three diked disposal areas are on the SE side of Seaway Island. Barge landing docks are at the center and E areas. The center and E disposal areas are each marked by a light.

(52) **St. Clair Flats Canal** extends from the N end of Lake St. Clair ship channel NE for about 1.7 miles along the SW end of Seaway Island to the junction with South Channel. The canal is marked by lighted and unlighted buoys, a light, and a **041°** lighted range.

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South Channel extends from the N end of St. Clair Flats Canal along the NW side of Seaway Island and bends E along the S shore of **Harsens Island, MI** to the junction with St. Clair Cutoff Channel at **Southeast Bend.** This section of South Channel is well marked by lights.

(53) St. Clair Flats Canal and South Channel below Southeast Bend have good available depths but have not been maintained for deep-draft navigation since completion of St. Clair Cutoff Channel. The U.S. side of South Channel has been extensively developed with summer cottages and small-craft landings.

(54) **Caution.**–The earth dike along the SE edge of St. Clair Flats Canal S entrance is reported to be submerged during periodic high water conditions. It is reported that several small boats have struck the dike when it was submerged. A large dayboard with the words Danger Submerged Jetty marks the approximate point where the jetty submerges.

(55) From the junction with St. Clair Cutoff Channel, South Channel leads NNE for about 6.5 miles to the junction with North Channel. The channel is well marked by lighted and unlighted buoys, lights, and lighted ranges, and is maintained at the Federal project depth of 27 feet.

Currents

(56) Vessels transiting South Channel are advised to favor the E side of the channel N of Russell Island, because the current flows strongly from the main river channel into North Channel.

(57) **Russell Island, MI**, is on the W side of South Channel just below the junction with North Channel. A shallow bank extends about 0.5 mile NNE from the head of the island. A lighted buoy marks the NE side of the shoal.

(58) **North Channel**, the northwesternmost part of the St. Clair River delta, branches W from the river just N of Russell Island, flows along the N side of Harsens Island and **Dickinson Island,** and empties into the E side of Anchor Bay. The outlet of the channel in the shallow water of Anchor Bay is well marked by buoys. Two irregularly shaped diked disposal areas front the channel on the N side of Dickinson Island.

(59) **Chenal A Bout Rond** branches SW from North Channel at the W end of Dickinson Island and flows into Anchor Bay.

(60) **Middle Channel** leads SW from North Channel between Harsens Island and Dickinson Island. The outlet in Lake St. Clair is marked by lighted and unlighted buoys. A 22-acre diked disposal area is on the W side of Harsens Island about 1.2 miles below the junction with North Channel.

(61) **Algonac, Mich.**, is a summer resort at the head of North Channel opposite Russell Island. Marinas at Algonac provide transient berths, gasoline, diesel fuel, water, ice, sewage pump-out, marine supplies, and a launching ramp. A 50-foot marine railway and hoists to 25 tons are available for hull and engine repairs. Ferries operate from Algonac to Harsens Island, Russell Island, and Walpole Island, Ont.

(62) Algonac is a **customs station.**

Quarantine, customs, immigration, and agricultural quarantine

(63) (See chapter 3, Vessel Arrival Inspections, and appendix for addresses.)

(64) **Quarantine** is enforced in accordance with the regulations of the U.S. Public Health Service. (See Public Health Service, chapter 1.)

(65) A **slow-no wake speed** is enforced on the channels and canals at Algonac.

Ferry

(66) A ferry landing is on the NW side of Walpole Island, Ont., opposite the upper end of Russell Island, MI. Breakwaters protect the 105-foot wharf on the N and S sides. A light marks the W end of the detached N breakwater. A ferry operates from the wharf to Algonac, MI.

(67) From the junction with North Channel, the dredged channel of the St. Clair River extends upstream for about 7 miles to a point about 1.3 miles above Fawn Island. The channel passes W of Fawn Island and is well marked by lighted buoys and lights. The channel is maintained at the Federal project depth of 27 feet.

(68) **Port Lambton, Ont.**, a village on the E side of the river about 1 mile above the junction with Chenal Ecarte, has a 125-foot Government wharf with a reported depth alongside of about 12 feet. A ferry operates from the wharf across the river to Roberts Landing. A marina is close S of the Government wharf. A **Canadian customs vessel reporting station** is at Port Lambton.

(69) **Roberts Landing, Mich.** is on the W side of the river 3 miles above Russell Island. A ferry operates across the river to Port Lambton.

(70) About 1.7 miles above Port Lambton, a shoal with a least depth of 15 feet is in midriver along the E limit of the dredged channel. A lighted buoy off the S end of the shoal marks the limit of the dredged channel.

(71) **Fawn Island, Ont.**, is off the Canadian side of the river about 3 miles above Port Lambton. Shoals with depths to 1 foot extend 0.4 mile SSW and NNE from the island. A buoy marks the S end of the shoals S of Fawn Island. A shoal with a least depth of 5 feet extends along the E limit of the dredged channel from about 0.3 to 1.3

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miles N of Fawn Island with a deep channel between. An unmarked channel with a least depth of about 18 feet passes E of Fawn Island and the shoals. The channel is slightly winding and is not frequently used; the dredged channel W of Fawn Island is the preferred route.

(72) **Marine City, Mich.**, is on the W side of the river 7 miles above Russell Island. **Belle River** flows S through the town and empties into the St. Clair River NW of Fawn Island. A ferry operates between Marine City and Sombra, Ont.

Channels

(73) In October 2001, the controlling depths were 4.6 feet (5.5 feet at midchannel) from the mouth of Belle River to the Bridge Street bridge, thence 2.0 feet (2.6 feet at midchannel) to the Broadway bridge. The channel is subject to shoaling.

Bridges

(74) Bridge Street bridge, about 0.5 mile above the mouth of Belle River, has a 28-foot fixed W span with a clearance of 13 feet. Broadway bridge, about 1.1 miles above the river mouth, has a fixed span with a clearance of 7 feet. Several overhead cables in the lower 2 miles of the river have a least clearance of 37 feet.

(75) Marine City is a **customs station.**

Quarantine, customs, immigration, and agricultural quarantine

(76) (See chapter 3, Vessel Arrival Inspections, and appendix for addresses.)

(77) **Quarantine** is enforced in accordance with the regulations of the U.S. Public Health Service. (See Public Health Service, chapter 1.)

Harbor regulations

(78) A **slow-no wake speed** is enforced on the Belle River. The Marine City Chief of Police acts as harbormaster and enforces the regulations of St. Clair County and the State of Michigan. Copies of the regulations may be obtained from the chief of police.

Wharf

(79) McLouth Yards, Inc. receives crushed limestone and coal at a wharf on the W side of the St. Clair River just below the mouth of Belle River. There is 1,200 feet of berthing space along the reinforced natural bank with a reported depth of 35 feet alongside and a deck height of 5 to 8 feet. The facility has 12 acres of open storage.

Small-craft facilities

(80) Marinas on the W side of the Belle River within 0.5 mile of the mouth provide gasoline, diesel fuel, water, ice, electricity, sewage pump-out, marine supplies, and a launching ramp. A 20-ton hoist can handle 42-foot vessels for hull, engine, and electronic repairs.

Ferry

(81) A ferry operates year round, depending on ice conditions, from Marine City, about 0.6 mile NNE of the mouth of Belle River, across the St. Clair River to Sombra, Ont.

(82) **Sombra, Ont.,** is on the E side of the St. Clair River opposite Marine City, MI.

(83) The following is extracted (partial) from **Canadian Sailing Directions CEN304, Chapter 3, St. Clair River**.

(84) *Sombra (42°43'N., 82°29'W.), population 420 (1981), is on the east shore 0.6 mile NNE of Fawn Island.*

(85) *Sombra is a **Customs** land border reporting station for passengers, general public, and commercial highway traffic, and is a vessel reporting station for pleasure craft.*

(86) *A ferry serves Sombra and Marine City, Michigan, year round, depending on ice conditions. This is the **Blue Water Ferry**.*

(87) ***Sombra Public wharf**, at the outer end of a causeway 230 feet (70.1 m) long and 20 feet (6.1 m) wide, is used by the Blue Water Ferry. The south face is 250 feet (76.2 m) long and is skirted by 23 pilings; berthing at this south wall is prohibited. The inner SE face, 82 feet (25 m) long, has 9 pilings with elevations of 12 feet (3.7 m) and depths of 4 feet (1.2m) in 1994. On the outer face, north of the ferry slip, there is a 50-foot (15.2 m) section of wharf with depths of 10 to 13 feet (3 to 4 m) in 1994, and a depth of 3 feet (0.9 m) along the north face of the wharf. There is a Canadian Coast Guard Emergency Response building with oil spill containment equipment on the south side of the wharf, and a **Customs office** on the north side.*

(88) *There are no facilities or shelter for small craft at Sombra Public wharf.*

(89) From a point 1.3 miles above Fawn Island, the channel through the St. Clair River is a natural deep-water channel 0.2 to 0.4 mile wide upstream for 6.5 miles to the lower end of St. Clair Middle Ground. The channel is marked by lighted buoys and lights.

(90) At **Stokes Point, Ont.,** (42°44.1'N., 82°28.7'W.), about 1.5 miles above Sombra, there is a ruined wharf. The wharf is marked by a light at its SW corner.

(91) Detroit Edison Co. has a powerplant with two wharves on the W side of the St. Clair River about 2

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miles above Stokes Point. Several stacks at the plant are prominent, and private lights mark the upper and lower ends of the wharf area.

(92) **Wharf 1:** 500 feet below Dock Upper Light; about 400 feet of berthing space; 16 feet reported alongside; deck height, about 8½ feet; storage tanks for over 11 million gallons of #2 and #6 fuel oil; receipt of fuel oil and bunkering vessels.

(93) **Wharf 2:** adjacent N of Dock Lower Light; 1,069 feet of berthing space; 29 feet reported alongside; deck height, 8½ feet; open storage for over 2½ million tons of coal; two receiving hoppers, operating rates 2,400 and 10,000 tons per hour; receipt of coal and bunkering vessels.

(94) Overhead power cables with clearances of 154 and 163 feet cross the river just above and 1.8 miles above the Detroit Edison Co. wharves, respectively.

(95) **Ontario Hydro Lambton Generating Station**, is on the E side of the river about 2 miles above the Detroit Edison Co. wharves. The coal wharf, 1,000 feet (305 m) long, had a depth of 30 feet (9.1 m) in 1994.

(96) **St. Clair, Mich.**, is on the W side of the river about 7.5 miles above Marine City. **Pine River** is a stream 100 to 150 feet wide, emptying into the St. Clair River near the S limits of the city. The St. Clair Inn and Country Club 0.5 mile N of the mouth of Pine River are prominent.

(97) In October 2001, the controlling depth in Pine River was 1.5 feet (4.0 feet at midchannel) in the dredged channel from the mouth of the river to the upstream limit of the Federal project, about 1 mile above the mouth. The channel is subject to shoaling.

Bridges

(98) Riverside Avenue (State Route 29) bascule bridge, just above the mouth of Pine River, has a clearance of 11 feet. (See **33 CFR 117.1 through 117.59 and 117.643**, chapter 2, for drawbridge regulations.) The Port Huron and Detroit Railroad bridge about 2 miles above the river mouth has a swing span with a clearance of 11 feet. Several overhead cables cross the river.

(99) A **slow-no wake speed** is enforced on the Pine River.

Wharf

(100) Cargill Salt Co. receives salt and coal at a wharf on the W side of the St. Clair River just below the mouth of the Pine River. The wharf has 1,085 feet of berthing space with reported depths of 16 to 19 feet alongside and a deck height of 7½ feet. The wharf has 1.1 acres of open storage for 55,000 tons of coal and 7,500 tons of salt.

Small-craft facilities

(101) The city of St. Clair and the Michigan State Waterways Commission have jointly developed docking and launching facilities on the Pine River immediately upstream of the Riverside Avenue bridge. Transient berths, gasoline, diesel fuel, water, electricity, sewage pump-out facilities and harbormaster services are available. The harbormaster monitors VHF-FM channels 9 and 16. In July 2001, depths of 5 feet were reported available at the facility. Another facility on the W side of the river about 1.4 miles above the mouth provides gasoline, diesel fuel, water, ice, electricity, marine supplies, sewage pump-out, and a launching ramp. A 30-ton hoist is available for hull, engine, and electronic repairs.

(102) **St. Clair Middle Ground**, a shoal with a least depth of 1 foot, is in midriver from just below the mouth of Pine River N for about 1.5 miles to opposite Mooretown, Ont. Lighted buoys mark the shoal at its upper and lower ends and on the W side.

(103) From the lower end of St. Clair Middle Ground, the dredged channel of the St. Clair River leads W of the middle ground and upstream for about 12.5 miles to just above the mouth of the Black River, thence for about 1.5 miles through natural deep water to the head of the river at Lake Huron. This section of the river is marked by lighted and unlighted buoys and lights, and is maintained at the Federal project depth of 27 feet.

(104) Downbound vessels should exercise caution when negotiating the westerly turn at the upper end of St. Clair Middle Ground to avoid striking these shoals. The channel to the E of the middle ground, formerly for upbound channel, had a controlling depth of 24 feet in 1961, but is not being maintained.

(105) **Courtright, Ont.,** is a village on the E side of the river opposite St. Clair, MI. The **Public wharf**, is 180 feet (54.9 m) long, 10 feet (3 m) wide and 6 feet (1.8 m) high, and had a depth of 11 feet (3.4 m) in 1994. Courtright is a **Customs vessel reporting station** for pleasure craft.

(106) **Mooretown, Ont.,** is on the E side of the river 1.5 statute miles (1.3 nm) above Courtright. The wharf at Mooretown had a depth of 7 feet (2.1 m) in 1994 but had no facilities for boaters. A pile 52 feet (15.8 m) south of the SW corner of the wharf had an elevation of 3 feet (0.9 m) in 1994.

(107) **Stag Island** is off the Canadian side of the river about 3 miles above St. Clair Middle Ground. The main vessel channel is along the U.S. shore W of Stag Island. Shoals extend about 0.8 mile S and 0.6 mile N from the island and are marked at the outer ends by lighted buoys. **Stag Island Shoal Light** is about midlength of the shoals off the S end of the island.

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(108) The Canadian channel E of Stag Island, formerly the upbound channel, had a controlling depth of 21 feet in 1950, but is no longer maintained. A **167°15'** lighted range marks the approach to Corunna, Ont., through the upper entrance to the channel and past the shoals off the mouth of **Talford Creek.**

(109) **Corunna, Ont.**, is a village on the Canadian channel E of Stag Island. A ferry operates from Corunna to the E side of Stag Island.

Wharf

(110) Shell Canada, Ltd. operates a wharf on the E side of St. Clair River N of the mouth of Talford Creek. The wharf is 1,000 feet (305 m) long and 9 feet (2.7 m) high, with a depth of 23 feet (7 m) in 1994. Petroleum products are shipped and received, and bunkering is available. A tank farm here makes a good landmark.

(111) Detroit Edison Marysville Power Plant wharves are on the W side of the river about 2 miles above Stag Island.

(112) **Wharf 1:** (42°55'22"N., 82°27'37"W.); 340 feet of berthing space; 18 feet alongside; deck height, 9 feet; open storage for 167,000 tons of coal; receipt of coal.

(113) **Wharf 2:** 500 feet above Wharf 1; 400 feet of berthing space; 22 feet alongside; deck height, 9 feet; open storage for 53,000 tons of coal; receipt of coal.

(114) A buoy marks the S side of a 16-foot shoal on the E side of the St. Clair River opposite Detroit Edison Marysville Power Plant Wharf 1.

(115) An overhead power cable with a clearance of 177 feet crosses the St. Clair River 1.9 miles above Stag Island.

(116) The upper part of the St. Clair River flows S between the cities of Port Huron, Mich., and Sarnia, Ont. The head of the river is entered from a dredged channel that leads through the shallow lower end of Lake Huron. A **180.3°** lighted range on the E side of the head of the river marks the approach to the river through this channel. A racon is at the front light. **Fort Gratiot Light** (43°00.4'N., 82°25.4'W.), 82 feet above the water, is shown from a white brick conical tower on the W side of the river head.

(117) **Blue Water Bridge,** a fixed highway bridge with a clearance of 150 feet, crosses the river just below the head. The bridge is prominent in approaching the river.

(118) **Caution.**–Currents in the upper part of the river are considerable, at times 5 mph or more above the Blue Water Bridge and 4 mph or more for 1 mile below the bridge. Upbound vessels will experience a W set between the Blue Water Bridge and Lake Huron Cut Lighted Buoys 1 and 2. Mariners should use the lowest possible safe speed in this reach to avoid damage to wharves and moored vessels.

(119) A **207½ °** lighted range on the W side of the river 0.5 mile below the Blue Water Bridge marks the channel through the head of the river to just below the bridge.

(120) **Bay Point** is a long narrow point that extends S along the E side of the river about 1.4 miles below the head. A lighted buoy marks submerged ruins off the S end of the point. A lighted buoy marks an 18-foot shoal off the W side of the inner end of the point.

(121) **Caution.**–An alternating one-way traffic zone is between Lake Huron Cut Lighted Buoy 1 and St. Clair/Black River Junction Light. (See **33 CFR 162.134 (c)(2),** chapter 2, for regulations.)

Anchorage

(122) Good anchorage, clay and gravel bottom, is abreast of Sarnia below the section of the rapids near the Blue Water Bridge. Good holding ground and some eddy will be found near the Canadian shore below the Canadian National Railways Wharf. Vessels should anchor as close to shore as possible to leave the midchannel clear for passing vessels.

(123) A railroad tunnel crosses under St. Clair River about 1 mile below the mouth of the Black River.

(124) **Port Huron, Mich.**, a city at the S end of Lake Huron, fronts the W side of the upper part of the St. Clair River. **Black River** flows SE through the city and empties into the St. Clair River 2.4 miles below its head.

Channels

(125) A dredged channel leads from the mouth of Black River upstream to about 0.4 mile above the Grand Trunk Western Railroad bridge. In July 2002, the controlling depths were 5.3 feet (11.8 feet at midchannel) from the mouth of the river to the 10th Street bridge, thence 3.2 feet (6.4 feet at midchannel) to the Grand Trunk Western Railroad bridge, thence 0.9 feet in the left half and 2.9 feet in the right half of the channel to the head of the dredged channel. Above the dredged channel, a midchannel depth of 2.2 feet was available to the Black River Canal. The channel is subject to shoaling. St. Clair/Black River Junction Light marks the N side of the mouth of the river.

Fluctuations of Water Level

(126) Each year spring freshets cause the level of the Black River to rise and fall from 4 to 6 feet. Day-to-day level changes due to wind can amount to several inches.

(127) Port Huron is a **customs port of entry.**

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Structures across Black River at Port Huron
***Miles above the mouth of the river**
****Clear width in feet proceeding upstream***

No.	Location and Name	Kind	Miles*	Clear width in feet of draw or spanopenings**			Clear height in feet above Low Water Datum	Remarks
				Right	Left	Center		
1	CSX RR bridge	Railroad	0.09			100	6	Bascule. Note 1.
2	Military St. bridge	Highway	0.33			73	13	Bascule. Note 1.
3	7th St. bridge	Highway	0.50			83	12	Bascule. Note 1.
4	10th St. bridge	Highway	0.94			90	18	Bascule. Note 1.
5	Canadian National RR bridge	Railroad	1.56			80	14	Bascule. Note 1.
6	Overhead cable	Power	1.76				63	
7	Overhead cable	Telephone	2.05				40	
8	I–94 bridge	Highway	2.30			117	20	Fixed.
9	Overhead cables	Power &Telephone	2.33				28	
10	Overhead cable	Power	2.50				46	
11	Overhead cable	Power	2.85				64	
	Junction with Black River Canal		4.34					
12	Overhead cable	Power	4.41				41	

Note 1.–See **33 CFR 117.1 through 117.59 and 117.625**, chapter 2, for drawbridge regulations.

Quarantine, customs, immigration, and agricultural quarantine

(128) (See chapter 3, Vessel Arrival Inspections, and appendix for addresses.)

(129) **Quarantine** is enforced in accordance with the regulations of the U.S. Public Health Service. (See Public Health Service, chapter 1.)

Coast Guard

(130) Port Huron Coast Guard Station is on the W side of the head of the St. Clair River just S of Fort Gratiot Light.

Harbor Regulations

(131) A **slow-no wake speed** is enforced on the following sections of Black River: from the mouth upstream to the Grand Trunk Western Railroad bridge, from 600 feet below to 800 feet above the I–94 bridge, and from 1,000 feet below to 500 feet above the intersection with the Black River Canal.

Towage

(132) Tugs for Port Huron are available from Detroit. (See Towage under Detroit.)

Wharves

(133) Port Huron has four deep-draft facilities. The alongside depths given are reported depths.

(134) **Port Huron Terminal Co. Wharf:** (42°57'32"N., 82°25'36"W.); 950-foot face; 25 to 29 feet alongside; deck height, 8 feet; 50,000 square feet covered storage; 100,000 square feet open storage; two 18-ton cranes; rail and water connections; receipt of general cargo, wood pulp, and beans; owned by city of Port Huron and operated by Port Huron Terminal Co.

(135) **Winkworth Transit Co. Wharf:** (42°58'17"N., 82°25'12"W.); about 1,500 feet of berthing space; 27 feet alongside; deck height, 8 feet; 50,000 square feet open storage; cranes to 60 tons; rail connections; receipt of crushed limestone and salt; owned and operated by Winkworth Transit Co.

(136) **Blue Water Aggregates Co. Wharf:** W side 0.9 mile below the head of St. Clair River; 1,100 feet of berthing space along natural bank; 28 feet alongside; deck

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height, 6 to 8 feet; open storage for 300,000 tons of stone; rail connections; receipt of crushed stone; owned by city of Port Huron and operated by Blue Water Aggregates Co., Inc.

(137) **Port Huron-Sarnia Tunnel**, a railway tunnel, crosses under St. Clair River from Port Huron Terminal Co. Wharf E to the shores just W of the Imperial Oil Ltd. tank field at Sarnia, Ontario, Canada.

Small-craft facilities

(138) The city of Port Huron and the Michigan State Waterways Commission have jointly developed small-craft facilities on the E side of the Black River just below the Military Street Bridge, on the E side of the river below 7th Street bridge, on the E side of the river between 7th and 10th Street bridges, and on the W side of the river below the I–94 bridge. Gasoline, diesel fuel, water, ice, electricity, sewage pump-out facilities, and harbormaster services are available. The harbormaster monitors VHF-FM channels 16 and 9. Other marinas in Black River additionally provide launching ramps and lifts to 60 tons for hull, engine, and electronic repairs.

Supplies

(139) Water and some marine supplies and provisions are available at Port Huron Terminal Co. Wharf. Bunker C and diesel fuel are available at oil company terminals at Sarnia.

Communications

(140) Port Huron has good highway and rail connections. St. Clair County Airport is 5 miles S of the city.

(141) **Sarnia, Ont.,** is a city near the head of the St. Clair River on the E side opposite Port Huron. The following is extracted (partial) from **Canadian Sailing Directions CEN304, Chapter 3, St. Clair River**.

(142) ***Sarnia Harbour*** *(42°59'N., 82°24'W.) is on the east shore near the head of St. Clair River. Sarnia is a major importing and exporting centre; petroleum products, rubber, chemicals, beans, sand, tobacco, grain and fertilizer are exported, and grain, steel, lumber, coal, crude oil, crushed stone and cement are imported. All types of marine supplies and facilities are available, including bunker and diesel fuel. Major marine repairs can be carried out. The navigation season is from mid-March to the end of December.*

(143) *The city of* ***Sarnia, Ont.*** *with a population of 74,376 (1991), is a petroleum refining and chemical producing area. Open farmland lies east and south of the city. Sarnia Airport offers scheduled passenger services. Sarnia is served by the Canadian National Railway and CSX Transportation. Good highways connect Sarnia with other major cities.*

(144) *Sarnia is a* ***Customs land border reporting station*** *for passengers, general public, and commercial highway traffic, a vessel clearing station for commercial vessels, and a vessel reporting station for pleasure craft.*

(145) *Immigration and agricultural inspection facilities are also available at Sarnia.*

(146) *Sarnia Harbour is a Public harbour administered by Transport Canada. The harbour limits include the Canadian waters of St. Clair River from Point Edward to below Southeast Bend.*

(147) *(Sarnia Harbour wharves are listed in the table.)*

(148) ***Point Edward, Ont.,*** *is a village on the E side of the head of the St. Clair River.*

Sarnia Harbour-Major Facilities

Name	Wharf length ft (m)	Depth † ft (m)	Elevation †† ft (m)	Remarks
				Note: All information in this table was provided by local authories. User should consult local authories for latest conditionsj.
Shell Canada, Ltd	2,000 (610)	27 (7.3)	11.5 (3.5)	Bulk loading and discharging of petroleum products, and bunkering.
Sun Oil Co. Ltd	1,000 (305)	22 (6.7)	8 (2.4)	Bulk loading of tankers.
Dow Chemical Co.	600 (183)	27 (7.6)	18 (5.5)	Loading bulk liquid products.
Polymer Corporation	600 (183)	24 (7.3)	10 (3)	General plant supplies and loading of bulk liquid products.
Mueller Brass Works	218 (66)	18 (5.5)		Mooring posts.
Imperial Oil Ltd.				All Imperial Oil wharves are fitted with manifolds for handing bulk products. The wharves have the usual facilities: lights, steam and fresh water.
- Lower dock	720 (219)	22 (6.7)	8.5 (2.5)	This dock can accommodate a ship 600 feet (183 m) long.
- Dock	283 (86)	25 (7.6)	8.5 (2.5)	
- No. 1 Crude	610 (186)	25 (7.6)	8.5 (2.5)	
- Cement dock	326 (99)	25 (7.6)	8.5 (2.5)	Lafarge Cement.
- Upper dock	592 (180)	22 (6.7)	8.5 (2.5)	A concrete wharf that joins Upper dock and No. 1 Crude dock can accommodate a ship 1,000 feet (305 m) long.
Belton Lumber Co.	1,000 (305)*	18 (5.5)		Mooring posts. *Berthing length.
Reid Aggregates Ltd.	440 (134)	23 (7)	6 (1.8)	Bulk stone storage.
Public wharf	1,040 (317)	24 (7.3)	6 (1.8)	Electricity and fresh water available Shed 300 x 40 feet (91 x 12 m). Shed 160 x 40 feet (49 x 12 m). Three sheds 140 x 40 feet (43 x 12 m).
Sarnia Elevator	900 (274)	22 (6.7)	5 (1.5)	Railway lines to wharf. Electrical power and fresh water available. Shed 475 x 100 ft (145 x 30 m).
Transport Canada North Slip-East Side	1,700 (518)	24 (7.3)		Mooring dolphins
Holmes Foundry Co.	262 (80)	20 (6.1)	7 (2.1)	Grounded ship used as wharf. Self-unloaders discharge sand.
Canadian National Railways water	1,100 (335)	18 (5.5)	10 (3)	Formerly Canada Steamship Lines wharf. Railway lines on wharf. Fresh and electricity available. Shed 750 x 100 feet (229 x 30 m).

† Depth below chart Datum. †† Elevation above chart datum

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