Much of the lands within the Shafter-Wasco Irrigation District prior to 1907 were owned by a large land company and were used for grazing purposes. In 1907, approximately four hundred farm families from all parts of the United States settled in the local area. The initial settlement was the result of activities of the California Home Extension, which was organized for group colonization.

As a result of the long, dry, hot summers and an average rainfall of 6.53 inches, the first settlers realized the need for irrigation. The District area was one of the first important farm areas in California to have its crop production based entirely on pump irrigation. The first domestic well drilled in Wasco was to a depth of 66 feet and cost $66. Production from this early well was 2,200 gallons per minute through use of a 50 horsepower gasoline-driven centrifugal pump. The decline in the groundwater table was very gradual until 1921, which indicated that the increasing number of pumps to serve larger irrigated acreage created, with a few exceptions, a decline in the groundwater table. The progressive lowering of the District groundwater averaged 2.3 feet per year, from 1921 to 1949.

The District was formally organized in September 1937 by Shafter and Wasco area farmers after careful studies of the needs and problems peculiar to the area. The District’s purpose was to find ways and means of replenishing rapidly dwindling underground water supplies.

With the start of construction of Friant Dam in November 1939 a future source of water for the District became a definite possibility. The District formally applied to the Bureau of Reclamation for Central Valley Project water in February 1946. The United States Bureau of Reclamation (USBR) provided a Factual Report for SWID in 1953 which identified groundwater supplies available to SWID and proposed surface water supplies to balance water demands within SWID. Water service to the District would be from the Friant-Kern Canal, which passes close to the eastern District boundary. In February 1955 the Board of Directors of the Shafter-Wasco Irrigation District executed a contract with the United States providing for a water service contract for 50,000 acre-feet of Class I water and 39,600 acre-feet of class II water and a repayment contract for the construction of a distribution system.
After the California Legislature enacted the Sustainable Groundwater Management Act of 2014 ("Act") in February of 2015 the District certified a Mitigated Negative Declaration for the "SWID Recharge Project" for use of adjacent District’s recharge facilities and the construction of up to 1,300 acres of recharge facilities in the District. Implementation of the SWID Recharge Project will help achieve sustainable groundwater levels and avoid the corresponding adverse environmental and economic burden associated with groundwater declines, including increased use of power and energy resources as well as the potential for falling or conversion of agricultural lands in the District to non-agricultural uses.

In April of 2016 the District held a Proposition 218 election that increased the assessment collected on all lands in the District. This increased funding for water supplies and recharge areas to help meet goals identified in the SWID Recharge Project and provide additional reserves for dry year operation.

The District entered into the Kimberlina Recharge Area Water Management Agreement with Homer LLC in November 2015. This provided funds for the construction of the 264 acre Kimberlina Recharge facility. The agreement provides for groundwater banking with up to 50 percent leave behind of water banked and recharge and recovery capacity in specific periods for each party. The recharge portion of the project started substantial operation in the spring of 2017.

The District is proceeding with the acquisition of additional recharge areas. This not only provides locations for groundwater recharge but also takes the lands out of agricultural production and reduces groundwater demands.

The District is preparing a joint Groundwater Sustainability Plan chapter with the North Kern Water Storage District along with the Cities of Shafter and Wasco that overlap both districts. The District is using measurable objectives and minimum thresholds in conjunction with four other northern Kern County districts with similar geologic conditions.