

The Beech-Maple Forest, which has been identified as at least near virgin in character, is an upland forest which lies at an elevation of 840-870 feet msl., well above the upper limits of the flood pool. This vegetation would not be affected by the reservoir.

Very briefly then, the entire opposition to this reservoir must be considered to be focused on the possible loss of a very small area of less than one to two acres on which exists scattered Canadian Yew bushes. Of the vegetation species mentioned by those opposing the reservoir because of potential adverse effect on the natural area, these are the only plants which lie within the area proposed to be flooded and these exist at an elevation which would be affected only infrequently in the operation of the reservoir.

The Wabash Valley Interstate Commission requested the Corps of Engineers to prepare a report which would indicate the extent and frequency of use of this flood storage area as identified by an evaluation of past rainfall records in this vicinity. This report, based on 30 years of record, 1930-1960, listed 17 occurrences of the use of the flood pool for storage (see attached copy of report). On no occasion did this study indicate storage of water above 807 feet msl; the maximum storage would have occurred in the spring of 1950 with two periods of storage at 804 feet msl. During one of these periods 31 days would have been included in the storage period, that is, during 31 days water levels higher than the conservation pool level would have been experienced. No estimate was given of the time during which the water level would have been maintained at the 804 foot level, presumably this would have been of very short duration since the operation of water releases from the flood pool is accomplished as rapidly as possible to insure maximum available storage at all times. The second period of flood water storage use in 1950 was 19 days.

Only two times in the 30-year period of study would the flood water storage level have exceeded 800 feet msl.

In conclusion, although there may be some basis for consideration of this area as an ecosystem unique to the State of Indiana, and there is a relatively meager basis for such a decision, the vegetation complex occurring in the Big Walnut Valley is not unique from a national viewpoint since it does occur over a wide area in eastern and northern United States. It cannot therefore qualify in this respect as being an instance in which federal funds should be used to protect a remnant of a segment of our national heritage in nature.

Secondly, the major portion of the suggested nature area is not endangered by the construction and operation of the reservoir. Operation of the reservoir will physically affect only one of two Canadian Yew colonies, a matter of occasionally inundating bushes which grow on an area not exceeding two acres.

Thus limitation of potential water supply to the Indianapolis Industrial complex is threatened by an exceedingly small tract which some people have attempted to build into a major national catastrophic demise.

Storage period	Date of maximum pool elevation	Maximum reservoir pool elevation (feet, mean sea level)	Frequency ¹ times per 100 years	Duration 807.3 (50-yr. flood)	Above 804.2 (25-yr. flood)	Elevation 799.5 (10-yr. flood)	Days 794.5 (5-yr. flood)
December 1949-July 1950	Mar. 8, 1950	806.8	2.29	-----	*31+19=50	103	133
April-September 1957	July 15, 1957	303.0	5.6	-----	-----	24	*6+7+41=54
March-July 1933	June 9, 1933	797.4	8.9	-----	-----	-----	37
May-July 1943	June 8, 1943	797.3	12.2	-----	-----	-----	23
December 1936-March 1937	Feb. 21, 1937	797.3	15.4	-----	-----	-----	38
January-June 1959	Apr. 1, 1939	795.4	18.7	-----	-----	-----	21
January-April 1959	Mar. 3, 1959	793.3	22	-----	-----	-----	-----
March-May 1948	Apr. 27, 1948	792.7	25.3	-----	-----	-----	-----
December 1951-February 1958	Jan. 9, 1958	791.2	28.6	-----	-----	-----	-----
January-February 1930	Jan. 29, 1930	789.7	31.9	-----	-----	-----	-----
June-September 1958	Aug. 1, 1958	789.3	35.2	-----	-----	-----	-----
January-March 1952	Feb. 26, 1952	788.0	38.5	-----	-----	-----	-----
April-May 1940	May 13, 1940	787.2	41.3	-----	-----	-----	-----
December 1932-February 1933	Feb. 7, 1933	786.1	45.1	-----	-----	-----	-----
February-March 1936	Mar. 19, 1936	735.4	48.4	-----	-----	-----	-----
February-April 1955	Apr. 4, 1955	734.3	51.6	-----	-----	-----	-----
December 1951-January 1952	Jan. 16, 1952	783.1	54.9	-----	-----	-----	-----

¹ Frequency based on 30 yr. of record.

² The 1955 flood is above elevation 804.2 for 2 different durations.

³ The 1957 flood is above elevation 794.5 for 3 different durations.

Note: Conservation pool at elevation 782.0 ft. m.s.l.