OBJECTIVE AND METHODOLOGY

Under Federal law, the State of Maine will be responsible for the entire bath of the high ground water transmissivity. The Water Resources Conservation Commission was formed in 1969 to the Department of Conservation to study and report on the water resources of the State of Maine. As part of this study, the Commission issued the Maine ground water flow map which was used as a basis for the original analysis of high ground water transmissivity. The map is based on a photographic analysis of well yields, linear features, and bedrock geologic features. In addition, the map is based on data collected from the Maine Department of Public Health, the Maine Geological Survey, the Maine Department of Environmental Protection, and the Maine Department of Inland Fisheries and Wildlife.

Several types of elements were used in the photographic analysis of the water resources in the Maine ground water flow map. These include linear features such as streams, rivers, and other natural water bodies, as well as bedrock geologic features such as faults, fractures, and other geological anomalies. The data collected from these sources was compiled into a comprehensive database and analyzed using various statistical and graphical techniques.

On the map, linear features are classified according to the scale of the original source, with larger scale features being more detailed and smaller scale features being less detailed. Linear features are generally the principal features of the landscape, while bedrock geologic features are less prominent. In addition, linear features are denoted by different symbols to indicate various types of features, while bedrock geologic features are noted according to their location and type on the map.

SUMMARY

Based on the compilation of well yields and photographic elements, potential high ground water transmissivity areas can be identified using the Maine ground water flow map. The map can be used to identify potential areas for further study, such as potential well sites or areas suitable for future development. Areas mapped as high potential flow zones should be evaluated further.

In addition to the photographic analysis, existing bedrock and hydraulic gradient maps were used to identify areas of high ground water transmissivity. The map was developed using a combination of data collected from various sources, including well yields, linear features, and bedrock geologic features. The map is based on data collected from the Maine Department of Public Health, the Maine Geological Survey, the Maine Department of Environmental Protection, and the Maine Department of Inland Fisheries and Wildlife.