Claire Puccia Parham chronicles the creation of an engineering wonder of the world, a wonder that is about a five-hour drive from here.

When it was constructed, between 1954 and 1958, The St. Lawrence Seaway and Power Project was the largest public works project in North America. It is the largest power and navigation project ever constructed by two nations.

The Seaway was the realization of nearly 100 years of plans to link the Great Lakes and the world beyond by a large canal and to generate hydropower to bring industry and comfort to a remote stretch of the New York-Ontario border.

Parham, a Clifton Park resident who hails from Watertown — on the western edge of the Seaway — uses oral history to show the reader what a political, engineering and construction triumph the Seaway was.

‘The St. Lawrence Seaway and Power Project: An Oral History of the Greatest Construction Show on Earth’

AUTHOR: Claire Puccia Parham
PUBLISHER: Syracuse University Press, 328 pages,
ISBN978-0-8156-0913-1
HOW MUCH: $34.95
MORE INFO: Claire Puccia Parham will appear at 7 p.m. Wednesday, May 13, at the Clifton Park-Halfmoon Public Library, Clifton Park, and at 12:15 p.m. Wednesday, May 20, at William K. Sanford Library, Colonie.

The project included work over 114 miles of the St. Lawrence River. Its several locks lifted ships nearly 600 feet as they steamed from Montreal to the west. It included several large hydroelectric dams. The Eisenhower Lock, near Massena, was so large and such a presence on the landscape that engineers tunneled a highway beneath it. To accommodate the higher water levels when the project was finished, builders relocated eight villages, with contractors moving many houses from their old foundations.

In addition to these physical features, it took a Canadian/American force of 22,000 workers to complete the work. The seven largest construction contractors in America participated in the project, as did the Army Corps of Engineers, Ontario Hydro, a skilled Canadian agency developing hydroelectric power and the Power Authority of New York State.

Sweep, complexity

To capture the sweep and complexity of this work, Parham follows a partly chronological and partly topical format. The first chapter, for example, is a history of how Canada and the United States decided to build the Seaway. The last describes the experience of “Inundation Day,” when construction workers removed the cofferdams that enabled the dams and locks to be built on dry land and the water returned to generate power and to sustain the locks that would move the ships.

The topical parts include chapters on the experiences of engineers and workers, worker safety and women who came to the area with their husbands.

Parham has a really big story and thoroughly researched it, and she lived near the project growing up. In such a situation, a lesser writer might be tempted to do all the talking or dominate the narrative.

Parham avoids this. She lets 55 men and women who worked on the Seaway tell the story in their own words. She writes
transitions and organizes the excerpts from her oral history interviews but she stays in the background and lets a chorus of voices from people who were there tell the story.

Along with the oral history, the book has 40 black-and-white illustrations and a map of the project. Many of the photographs were taken by Alfred Mellett, the official photographer for the Power Authority. However a significant number came from Parham’s interviewees.

So much is going on, in terms of amazing construction work, that choosing a few anecdotes is a challenge. I was impressed that for the locks and dams the builders built cofferdams in fast-flowing water so they could dig down to bedrock and build on land that was, at least temporarily, dry. The locks and dams are enormous and it is amazing to me that the cofferdams were almost as strong and extensive as the permanent dams themselves.

For several decades before Congress and the Canadian Parliament authorized construction of the Seaway, the Army Corps of Engineers took soil borings to determine where the glacial till and the river sediment ended and the bedrock needed for a safe construction base began. They took tens of thousands of borings and still were often surprised by how much material had to be removed.

And, the material was being removed in every season — from blazing summer to freezing winter. Barbara Hampton, who came to Massena with her husband, Robert, a Union College grad, said, “I realized the weather had a personality of its own and I had to learn to deal with it.” It was so cold that motor oil would freeze in the engines of equipment left outside on winter nights.

**Technical terms**

In a few places, the author and the people interviewed used design and construction terms that I did not understand. In a few other places, I had difficulty figuring out how the various dams and locks related to each other.

This confusion, however, was the exception rather than the rule. There is so much fascinating politics, design, construction and slices of everyday life in the is book that it is worth reading.

In the 50 years since the Seaway opened, ships have gotten larger, the economics of cities have changed and fewer ships use the Seaway. However, Parham’s combination of narrative and oral history vividly shows how the building of the Seaway was indeed “the greatest construction show on earth,” an event that transformed individual lives and the communities along the St. Lawrence and the Great Lakes.

Claire Puccia Parham will appear at 7 p.m. Wednesday, May 13, at the Clifton Park-Halfmoon Public Library, Clifton Park, and at 12:15 p.m. Wednesday, May 20, at William K. Sanford Library, Colonie.