Photographer Aaron Wynia travelled to the Mississippi River Delta in Louisiana to visit the amphibious homes of Old River Landing.
When Hurricane Katrina devastated Louisiana in 2005, more than a million people were forced to flee their homes. Months went by before some residents were allowed to return to the places they lived, many of which were damaged irreparably. Livelihoods and communities were lost or changed forever. Elizabeth English (above), founder and director of the Buoyant Foundation Project, was researching hurricanes at Louisiana State University at the time and was invited to tour some of the most affected areas by boat. As she floated over the submerged streets, cars, and houses, she couldn’t help but wonder: What if people didn’t have to leave? What if communities could find affordable adaptations that allowed them to remain in their homes and among their networks of support?

She started to think about architectural solutions to the problem: houses that are engineered to float upon rising waters, to ride out the flood and then settle back in place. The concept is both radical and straightforward; it’s also anything but new. Communities all over the world have used it as an adaptation for centuries.
Unfortunately, the American Federal Emergency Management Agency (FEMA) has long discouraged the construction of “amphibious” houses, not wanting to open the door to new development on flood plains. This stance has, among other things, made it nearly impossible to insure amphibious homes in the U.S. But some have chosen to adapt their existing homes and remain in flood zones regardless; it’s where they live, and where they take strength from their communities.

The basics of “amphibiation,” or retrofitting an existing house with a buoyant foundation, are actually fairly simple. First, you need to place blocks of buoyant material like styrofoam underneath the house. Second, you need to attach the structure to guideposts, so that it remains in place while floating and settles back down in the same spot after the water recedes. Finally, you need a subframe that connects all the pieces together.
In the tight-knit recreational fishing community of Old River Landing, a couple hours northwest of New Orleans, many of the structures have been fitted with buoyant foundations. Sitting outside of the protection of the levees on the banks of a bend in the Mississippi River, the area has been submerged by flooding countless times. Locals taught themselves (and each other) how to adapt their homes. They helped one another to figure out the details of the engineering, and their efforts have been largely successful. With deep roots in the area, Jacques LaCour (p. 112) is a key part of the community. He and his wife, Tilly, own the local bar and restaurant (which is fully amphibious, of course). For those like Jacques and resident Buddy Blalock (p. 109), who love this improbable place, amphibious design has made it all possible.

There is no doubting this: the storms will return to Louisiana, and they will do so more frequently and with greater intensity. The river will flood again and again. The extreme weather effects of anthropogenic climate change will continue to intensify, and low-lying communities like Old River Landing are poised to experience some of the most acute effects.

But as a result of their ingenuity, Jacques LaCour, Buddy Blalock, and the people who occupy the houses along the banks will be able to hold fast to their roots and remain where they are most secure. Amphibious architecture offers a glimpse of a way people can adapt in the face of climate change, even with little institutional support beyond that of their neighbours and friends.*