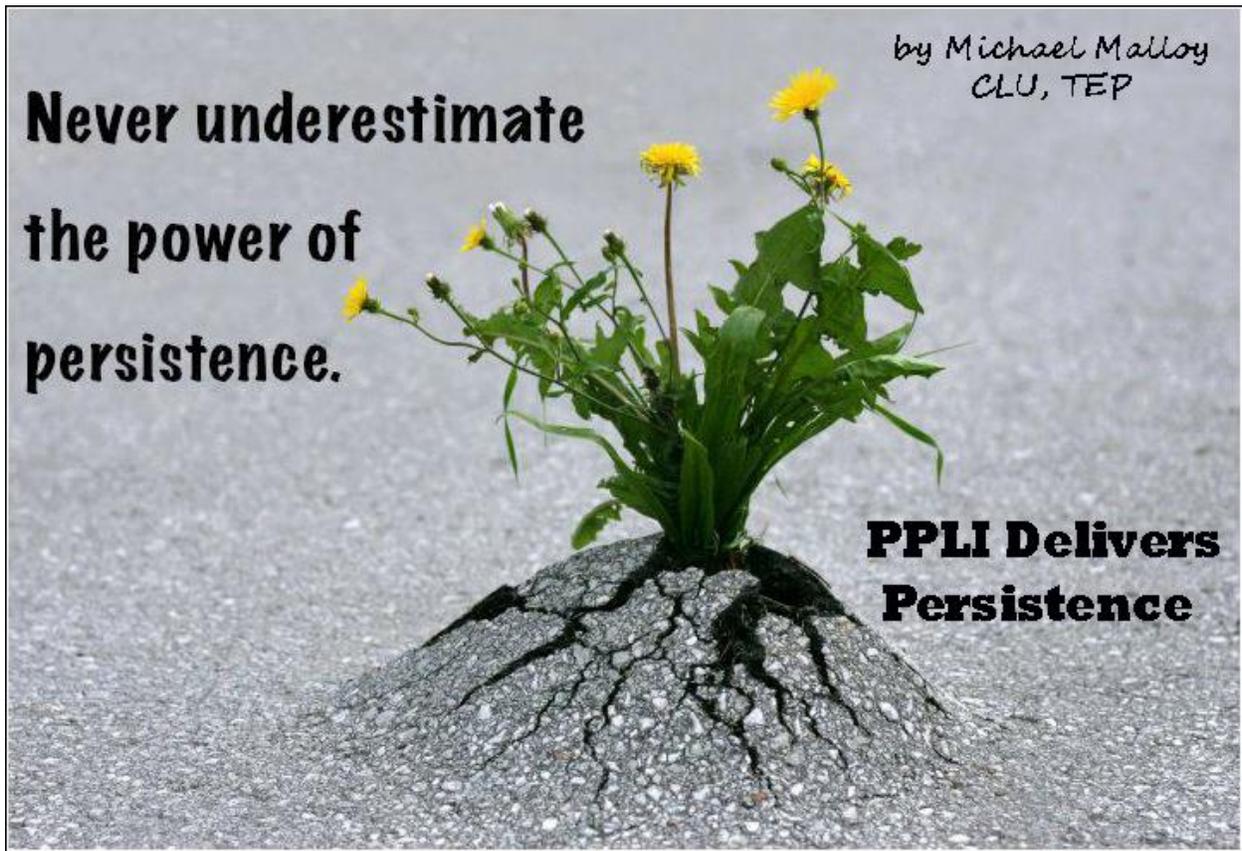


Never Underestimate the Power of Persistence



PPLI Delivers Persistence

At [Advanced Financial Solutions, Inc.](#) in our quest to solve difficult client issues using [Private Placement Life Insurance](#) (PPLI) structuring, we have found that being persistent is a great benefit. Since we have clients throughout the world in diverse financial environments, our problem solving expertise is key to a successful outcome.

By way of analogy we give you an example from science. Have you ever wondered how water can travel from the roots of a tree to the top? Consider the height of

coastal redwood trees in California, reaching up to **379 feet (115.5 m)** in height (without the roots). Part of the solution is a persistent chain of water molecules that travel skyward to the top of these giant trees.

First let us give you some examples of being persistent in our PPLI structuring for our clients.

Unique Solution #1

A Chinese family came to us for succession planning for offshore companies owned by the family. They wished to pass these offshore companies located in various parts of the world to their son, who is a green card holder residing in the U.S. Besides transferring the companies at the death of the wealth owner via a properly structured PPLI policy, the son wished to take the profits from the companies and invest them in real estate projects outside the U.S. We created a PPLI structure for the family that accomplished all of these aims. The PPLI structure also gave them tax-deferral on all the future revenue from the companies.

Unique Solution #2

An Israeli client who resides in Italy has a company where all the revenue is generated in Italy. He is also a U.S. green card holder, but spends very little time in the U.S. He had a Nevada company that did the processing of his customers orders which came from customers worldwide. The client wished to re-structure to lessen his U.S. tax burden which we accomplished for him using a 953(d) offshore PPLI policy.

Unique Solution #3

A young entrepreneur with worldwide holdings in sports, natural resources, gaming, and content management wishes us to check his compliance with FATCA and CRS. He is a U.S. green card holder as well as a UK resident, and citizen of an African country. He had

created a dozen companies with excellent potential. We brought him into compliance with tax authorities worldwide with a PPLI structure. We gave his revenues a boost, because in the PPLI structure all the profits become tax-deferred. We protected his family with the low-cost death benefit of the PPLI policy.

We are grateful to [Mark Vitosh of Iowa State University](#) for his [article in Scientific American](#) which excellently explains how water can reach the top of the tallest trees in the world.

"There are many different processes occurring within trees that allow them to grow. One is the movement of water and nutrients from the roots to the leaves in the canopy, or upper branches. Water is the building block of living cells; it is a nourishing and cleansing agent, and a transport medium that allows for the distribution of nutrients and carbon compounds (food) throughout the tree. The coastal redwood, or *Sequoia sempervirens*, can reach heights over 300 feet (or approximately 91 meters), which is a great distance for water, nutrients and carbon compounds to move. To understand how water moves through a tree, we must first describe the path it takes.

Water and mineral nutrients--the so-called sap flow--travel from the roots to the top of the tree within a layer of wood found under the bark. This sapwood consists of conductive tissue called xylem (made up of small pipe-like cells). There are major differences between hardwoods (oak, ash, maple) and conifers (redwood, pine, spruce, fir) in the structure of xylem. In hardwoods, water moves throughout the tree in xylem cells called vessels, which are lined up end-to-end and have large openings in their ends. In contrast, the xylem of conifers consists of enclosed cells called tracheids. These cells are also lined up end-to-end, but part of their adjacent walls have holes that act as a sieve. For this reason, water moves faster through

the larger vessels of hardwoods than through the smaller tracheids of conifers.

Both vessel and tracheid cells allow water and nutrients to move up the tree, whereas specialized ray cells pass water and food horizontally across the xylem. All xylem cells that carry water are dead, so they act as a pipe. Xylem tissue is found in all growth rings (wood) of the tree. Not all tree species have the same number of annual growth rings that are active in the movement of water and mineral nutrients. For example, conifer trees and some hardwood species may have several growth rings that are active conductors, whereas in other species, such as the oaks, only the current years' growth ring is functional.

This unique situation comes about because the xylem tissue in oaks has very large vessels; they can carry a lot of water quickly, but can also be easily disrupted by freezing and air pockets. It's amazing that a 200 year-old living oak tree can survive and grow using only the support of a very thin layer of tissue beneath the bark. The rest of the 199 growth rings are mostly inactive. In a coastal redwood, though, the xylem is mostly made up of tracheids that move water slowly to the top of the tree. Now that we have described the pathway that water follows through the xylem, we can talk about the mechanism involved. Water has two characteristics that make it a unique liquid. First, water adheres to many surfaces with which it comes into contact. Second, water molecules can also cohere, or hold on to each other. These two features allow water to be pulled like a rubber band up small capillary tubes like xylem cells.

Water has energy to do work: it carries chemicals in solution, adheres to surfaces and makes living cells turgid by filling them. This energy is called potential energy. At rest, pure water has 100 percent of its potential energy, which is by convention set at zero. As water begins to move, its potential energy for

additional work is reduced and becomes negative. Water moves from areas with the least negative potential energy to areas where the potential energy is more negative. For example, the most negative water potential in a tree is usually found at the leaf-atmosphere interface; the least negative water potential is found in the soil, where water moves into the roots of the tree. As you move up the tree the water potential becomes more negative, and these differences create a pull or tension that brings the water up the tree.

A key factor that helps create the pull of water up the tree is the loss of water out of the leaves through a process called transpiration. During transpiration, water vapor is released from the leaves through small pores or openings called stomates. Stomates are present in the leaf so that carbon dioxide--which the leaves use to make food by way of photosynthesis--can enter. The loss of water during transpiration creates more negative water potential in the leaf, which in turn pulls more water up the tree. So in general, the water loss from the leaf is the engine that pulls water and nutrients up the tree.

How can water withstand the tensions needed to be pulled up a tree? The trick is, as we mentioned earlier, the ability of water molecules to stick to each other and to other surfaces so strongly. Given that strength, the loss of water at the top of tree through transpiration provides the driving force to pull water and mineral nutrients up the trunks of trees as mighty as the redwoods."

In some ways we are taught to see scientific processes like this as an inevitable result of something--something ordinary. But an inevitable result of what? That is the point. From another perspective, it is the inevitable result of something miraculous. Let us call it *the miraculous persistence of nature*.

[Advanced Financial Solutions, Inc.](#) enjoys being persistent in finding PPLI structuring solutions for our worldwide client base. Please [contact us](#) for a unique solution to your asset structuring needs.

We invite you to put our persistency to the test!

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