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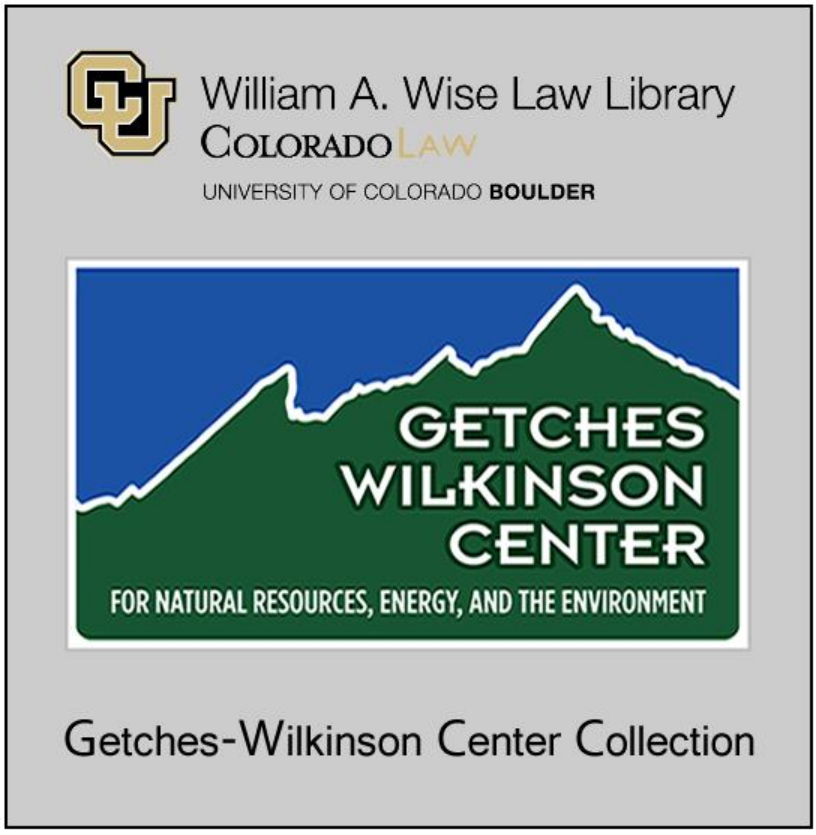

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COMING TO GRIPS WITH GROWTH IN THE WEST: TRADITIONAL COMMUNITIES, FREE RIVERS, AND THE NEW MEGALOPOLISES

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For the past 34 years, when I first came out here to go to law school, I've been trying, in one fashion or another, to learn about the West. Like so many before me, I tended to focus my energies on the nineteenth century.

How seductive it was. Lewis and Clark. The mountain men. The idealistic family journeys to farm and settle the lush Willamette Valley. The epic gold rush. The rise of the ranch cattle industry, a variant of Jefferson's dream but faithful to it. Yellowstone. Yosemite. Muir.

Somewhat ironically, learning about the nineteenth century included studying the vibrant civilizations that would be overwhelmed by Manifest Destiny. The Mexican mission system flourished until the War on Mexico, the Bear Flag, and the 1848 conquest treaty, called Guadalupe Hidalgo. The tribes lived free under their own rule in the Northwest until the Stevens treaties, in the Southwest until the Apaches were cornered, in the upper Great Plains until the Sioux were finally closed in. It is easy to see how the nineteenth century drew my -- our -- attention. So many freedoms, so many conquests.

But as my learning has gone on, I find myself ever more preoccupied with this century and the one we are about to enter. For finally I understand that this is the century in which we have overwhelmed the land, broad though the western landscape may be. To be sure, during the 1800s we moved a lot of earth, rearranged rivers, inundated canyons, caused human diseases and

deaths with our poisons, and killed off many wolves, eagles, and straw-colored bears. But the scale of our assault on the land in this century, especially since the end of World War II, has been magnitudes greater, so much so that comparisons can hardly be made. Further, the pace we have put ourselves on, which is accelerating, has generated not just questions, but also anxiety and despair about the next century, even in optimistic people. This is in part a matter of what we call economics but it is also an affair of the heart and soul, for lord, how we westerners love this large and varied, plain and wondrous, land.

One way to begin to comprehend both the highway we have taken and the nature of the terrain that lies ahead, is to gain a sense of the region in 1945 and compare it to today. There is also another point in time, itself not so many years ago, and a particular locale, that can offer perspective on the origins and scale of these broad-shouldered accomplishments.

The din rose to an ear-shattering level at the corner of Central and Washington, the heart of downtown, as midnight approached on New Year's Eve. Celebrants discharged round after round from their pistols and rifles. A steady barrage of fireworks, many of them homemade and amounting to small bombs, blasted holes in the dirt streets. The high, shrill whine of steam whistles cut through the cool night air. One whistle operator, rising to the occasion with a special flair, had

constructed an elaborate contraption with seven separate tubes, emitting "a noise both appalling and wonderful."

Not that the town lacked for activity on normal days. Although the population was just 5,500 and although the demands of farming, the principal occupation in the valley, left many residents with precious little free time, this settlement knew how to celebrate. There were dozens of saloons. Gambling licenses were easy to obtain and the place had attained something of a reputation in that regard. One reporter called it "the Monte Carlo of the Union."

But, even given the proven capability for gaiety in this wide-open town, even given that any New Year's would be a fit excuse for an extended bash, the excitement was at its all-time high in Phoenix this particular evening, because a new century was breaking across the land.

Phoenix welcomed the arrival of the twentieth century with a spirit of buoyant optimism and ambition. It had been named the territorial capital in 1889, wresting that honor away from Prescott. By 1895, it had tied itself into both the Southern Pacific line and the Santa Fe to the north. Now Phoenix had the means to get its produce, both grains and specialty produce, especially its oranges, to markets from coast to coast. And Phoenicians discovered early on that the magnificent climate and sweet citrus smells could boost a promising real estate market: advertisements in the *Arizona Republican* exclaimed that "A Princely Spot is ORANGEWOOD. Make your home among the Orange Groves. ORANGEWOOD is the fashionable suburb of Phoenix. . . ."

Yet the hard fact was that turn-of-the-century Phoenix remained a small, dirt-road, territorial town with limited resources. That could be changed, but hard work lay ahead and people would have to pull together.

The city fathers faced two overriding issues. The first was statehood. In 1863, Congress split the sprawling New Mexico Territory, and created Arizona Territory. Any chance of statehood, however, lay dormant for decades.

Water was the other overarching matter. Phoenix needed a major dam on the mainstem Salt River to store the floodwaters and put them to good use by releasing steady flows to irrigators during the summers and dry years.

The tasks were daunting, but the timing was perfect and Phoenix's civic leaders were able and visionary. In 1902, Congress passed the Reclamation Act. With Benjamin Fowler and others pushing Phoenix's proposal energetically and effectively in Washington, D.C, Phoenix's dam-and-reservoir project on the Salt River moved to the head of the line.

From that point on, it was a long ride but downhill all the way. The dam, rightly named after Theodore Roosevelt, was dedicated on March 18, 1911. Roosevelt himself did the honors. With 350,000 cubic yards of stone cut by Italian stonemasons, the elegant Roosevelt was the largest masonry dam in the world.

Statehood followed on the heels of Roosevelt Dam and its nineteen-mile-long reservoir, with the long-awaited moment falling on Valentine's Day, 1912. Although no seven-pipe steam whistles were reported, the ceremonies eclipsed the New Year's

Eve celebration twelve years previous and even the visits of Roosevelt and President Taft before him. Phoenix, now a town of some 12,000 strong, had shown that it could dream its own actual future.

Most accounts, at the turn of the century and later, remark on Phoenix's single-minded drive and civic self-aggrandizement. One writer called it "aggressive boosterism," and it was. But it was also quintessentially American and western, that is, of the American West built by Europeans. Anything and everything was possible.

The other towns of the Southwest a century ago had much in common with Phoenix. Los Angeles had boomed from a small agricultural village of just 11,000 in 1880 to over 100,000 by the beginning of the century. El Paso, the largest city in the deep Southwest with a population of 16,000 people in 1900, had grown into a brawny industrial and mining center along the Mexican border with four separate railroad connections. Albuquerque, with a big "Americanization" push, blazed the statehood trail for New Mexico, which joined the Union in January, 1912, five weeks before Arizona.

Salt Lake City had become the capital city of a State of the Union in 1896, with a turn-of-the-century population of 54,000. By 1900, the Denver area had grown to 136,000, twenty-fifth largest in the nation. A reminder, though, of how fundamentally

different that frontier "metropolis" was: Denver had 800 miles of streets, of which just twenty-four miles were paved.

Las Vegas? That future dynamo did not even exist in 1900 nor, after its founding in 1905, did it show up on the census of 1910 or 1920. The floor for qualifying as a city was 2,500 people.

Needless to say, at the close of World War II, Phoenix was no longer a dirt-road, 5,000-person town. It had become a city of 75,000 people, the center of a metropolitan area with a population of 250,000. Still, it more closely resembled the celebratory, territorial settlement of January 1, 1900, than it did the megalopolis, pushing 3 million people, that would swarm all over the Valley of the Sun half a century later. The civic leaders at the end of the War, at the beginning of a whole new time, knew what they wanted for the Phoenix area. The same was true for all of the cities of the Southwest. They all had grown steadily but they all wanted much, much more -- expansion of eight, ten, twelve times, more.

I saw some of this myself, though my vantage point was limited, when I lived in Phoenix, first getting my sea legs as a lawyer, when the heavy aromas from the orange blossoms intoxicated me so on mild spring evenings. Even then, in 1965, Phoenix remained a small city, where most lawyers went to work in slacks and no sport jackets, where you saw as many ranch hands as

lawyers downtown, and where the perfume from the orange groves had not given way to condominiums and shopping centers.

A small city. When I made an excited call to my mother in Michigan to tell her of my job with an excellent law firm in Phoenix, I received a long dead space from the other end of the line. Then she asked, truly asked: "*Phoenix*? Phoenix *where*?" On the day I first drove into town, I wanted to go straight to the firm's office building. Having been told that Lewis and Roca was a "downtown firm," I stopped at a coffee shop to ask directions. "How do you get to downtown? You're smack in the middle of it, young fella."

The moment passed quickly, just as all moments have passed quickly during modern Phoenix's history. When I lived there, as at the turn of the century, the ambition was as palpable as Camelback Mountain and the Superstitions. I knew well that the city had just attracted a Triple A baseball team, the Phoenix Giants, and that the civic determination was to become major league.

I had no remote idea, though, that Phoenix had long ago outstripped its resource base in the Salt River Valley, that water was just then backing up against Glen Canyon Dam in order to get electricity to Phoenix and other cities, and that the Salt River Project, which supplied energy to metropolitan Phoenix, was heading up various consortiums to build coal-fired power plants in northern Arizona, Nevada, New Mexico, and even northwestern Colorado. I never had any real sense of how incredibly effective the civic and industrial leaders of Phoenix had been during the

first two-thirds of the century, nor did I know that the other cities of the Southwest had undertaken similar pell-mell races, finally uniting in what I would later call the Big Build-up of the Colorado Plateau.

I never took the time to identify the plain benefits of the West's grand undertaking -- cool, comfortable rooms for children to grow in; room for businesses to prosper in and give us the choices we want; peaking power to prevent brown-outs in critical-care rooms; even beautiful artificial lakes. Nor did I understand that the benefits would be accompanied by large, often avoidable, costs -- subsidies that helped build government budget deficits; drowned canyons that once gave us hanging gardens, beauty, solitude, and Anasazi villages tying us to a past at once different and common; wounded or destroyed runs of the quick, strong Pacific salmon; and poisons for workers in the uranium mines and mills and ordinary people breathing bad air.

I did not begin to comprehend, either, the many forms that conquest can take or how much our society can accomplish in a flicker of time, how the span of time since New Year's Day, 1900, was just a strobe-light flash. Gaining some understanding of those things would take a journey of thirty years. What I did understand then was that everyone took a personal pride and stake in Phoenix, so young and muscular, and that everyone believed that everything was possible.

And mark it down that it worked for Phoenix and the other Southwestern urban centers that joined together to secure large water projects, mines, and power plants on the public's rivers

and lands, especially on the Colorado Plateau. The Southwest's population shot from 8 million in 1945 to 32 million in the late 1990s. Almost all of the growth was in the cities. In the West as a whole, population in the eleven western states stood at 17 million at the end of the War. Today it has boomed to 57 million. By the year 2000, it will hit 60 million, a 350% increase.

At the end of World War II, when the modern land rush began, the traditional system of western water law remained intact. But as the habitat for the law -- the social habitat as well as the natural habitat -- began to undergo fundamental change, the law began to reflect geographical reality, social values, and economics.

We began to understand the costs. Burgeoning budgets. Lost rivers. Flooded and drained wetlands. Wrecked canyons. Still more extinguished species.

Other costs were paid disproportionately by minority peoples. Traditional western water law never worked well for Indians or Hispanics. Hispanic communities were forced out by the new reclamation economics on the lower Rio Grande and flooded out on the upper San Juan. Among the tribes, traditional ways of life were debilitated at Pyramid Lake and Walker River, on the salmon rivers of the Northwest, on the upper Missouri, and many other places.

And take Black Mesa. Arizona, and the Phoenix metropolitan area in particular, had dreamed of, and fought for, a major diversion of Colorado River water for most of the century. The Central Arizona Project (CAP) became a reality in the 1968 Colorado River Basin Project Act, one of the two principal water and power bills of the era. Initially, electricity to pump water on the pipeline's uphill runs was going to be generated by the Bridge and Marble Canyon Dams, which would have flooded 146 miles of the Grand Canyon. It was close, but public opinion rose up. Instead, Navajo Generating Station, sited next to Glen Canyon, would make the electricity for the CAP. The coal would come from Black Mesa, sacred to the Hopi. In spite of the leverage the Hopi had -- their coal was some of the best in the world and it was the linchpin for the CAP, for the Big Build-up of the Southwest -- Peabody Coal Company secured the coal in a sweetheart lease that included low royalty rates and Hopi water at the laughable rate of $1.67 an acre-foot. Now we learn, from personal files recently opened at the University of Utah Library, that John Boyden, the lawyer for the Hopi, represented Peabody Coal at the same time on the same transaction.

I believe, especially given the way that events have accelerated so quickly, and on such a large scale, that we have responded admirably in many respects.

In a sense, the largest trend is the way that water law has opened up. Traditionally, water policy has always been a closed system. Individual developers, not any government, controlled the rivers. Government was needed only to fund and build projects for individual developers. Water was water, separate from land, separate from wildlife, separate from social constraints, largely separate, in fact, from economic constraints. Then, beginning most notably in the late 1970s and 1980s, the public showed its determination to become involved in water decisions -- a shift away from the right of individual water developers to make unilateral decisions toward a fuller recognition of the public interest. Although there are plenty of remnants of the idea that water policy is a closed domain, the dominant approach now is to treat water as one organic part of natural resources policy, of social policy.

We have begun to change the way we make natural resource decisions. The traditional structure has had two main layers, general federal laws -- the Federal Power Act, the Reclamation Acts, the Taylor Grazing Act, and modern federal statutes such as NEPA, the Clean Water Act, and the NFMA -- and state laws, such as water laws and state forest practices acts, which typically were much looser. In many cases, however, we have broken the traditional mold and moved into much more flexible, creative, and individualized approaches focussing on specific natural systems. The federal government is less dominant, sometimes serving mainly as a convenor. The states and the third group of sovereigns, the tribes, have become much more active. The new approach is

collaborative, with all affected governments, interest groups, and disciplines at the table.

The objective is sustainability of some natural system. Traditional multiple use-sustained yield management measured outputs such as acre-feet, kilowatts, board feet, and animal unit months. Sustainability today is broadly writ, encompassing a much broader range of things to be sustained, including salmon, eagles, wolves, humbler animals such as voles and chubs, archaeological sites, good rafting water, long vistas, wetlands, open space, solitude, beauty, and the cultures of traditional societies, whether they be Indian tribes, Hispanic towns, or ranch and farm communities. We have rightly begun to adopt an ambitious definition of sustainability.

We've made impressive progress in this kind of decisionmaking, which is local not national, particular not general, open not closed, creative not cookie-cuttered, messy not neat. You can see it at Yellowstone, at Lake Tahoe, on the Truckee River, in the Sacramento Bay Delta, at Mono Lake, in the Grand Canyon, on the Clark Fork in Montana, along the Columbia River Gorge, on the Umatilla River, in the rivers where the new watershed councils are at work, and at numerous other places.

So we have responded to changing times and have opened up the process to try to achieve sustainability. It is a real accomplishment we ought to take pride in.

Yet we have an uneasiness in our hearts and minds and viscera about whether making collaborative decisions based on natural systems -- valuable though the approach may be -- can be enough in the long term. Take the groundwater situation in metropolitan Phoenix. Arizona has taken strong, progressive action -- the Groundwater Management Act in 1980, the limits on water farming in 1991, the 1995 rules on "assured water supplies." The current groundwater overdraft is about 350,000 acre-feet, down from about 1.3 million acre-feet in 1980. Yet the current figure is misleading because a depressed agricultural economy has reduced the demand for water and Phoenix has had several recent wet years. The true reduction is considerably less. Probably the current level of overdraft is best understood as being about 850,000.

So Phoenix remains far from safe yield, even though it is now receiving Colorado River water. It is uncertain how much future CAP water Phoenix can acquire from farmers and tribes. Meanwhile, the people continue to pour in. Arizona is the nation's third fastest-growing state.

Even water transfers, today's panaceas, can have steep costs -- some of the same costs as old-style projects, others that we have not learned how to address in a serious way.

Water policy is social, as well as natural resource policy. It always has been. Transfers can take irrigated land out of business and debilitate farm and ranch communities. We have seen that at Owens Valley, along the Arkansas River in Colorado, and in some Arizona rural areas before the water farming debacle was

largely arrested in the early 1990s. Today farms up and down the Colorado Front Range operate as tenants, waiting for Colorado Springs, Thornton, and other cities to call in their leased rights when new subdivisions want the water.

Water marketing can also debilitate traditional communities. In Northern New Mexico, acequia associations -- the Hispanic water distribution collectives -- already feel the pressure from Albuquerque, which is growing apace with no significant water conservation program. As a mayordomo from an acequia in the Chama Valley told me, "Since a ditch system must be maintained by the collective labor of its users, each time a parcel loses its water rights, a proportionate amount of labor and ditch fees is also lost to the system as a whole. . . . Each member is a link in the chain of community water use and control, and each time a member and his quota of water and labor are lost, the overall chain is weakened." The integrity of our legal system could not hold when it came to recognizing Hispanic ownership of their land grants, supposedly guaranteed by the Treaty of Guadalupe Hidalgo, but the Hispanic communities have by and large held on to their water. Can our system of water laws have the integrity to assure a fair treatment of the acequias when the cities and their developers come calling?

The uneasiness about Phoenix groundwater is replicated for aquifers and river systems across the West. The apprehension about transfers in Hispanic communities is found on many reservations. Perhaps worse, the process for Indian water settlements is in shambles, leaving those tribes without

quantified rights wondering if they will ever see their long-promised Winters water. The pressure to supply water for urban growth continues to build. Seven other western states join Arizona among the ten fastest-growing states. California is projected to grow by more than 50%, or 17 million people, by the year 2025. Several of the other western states are projected to grow at even faster rates. That is 2025. What about 2050?

We know we can produce enough molecules of water for population growth in virtually any magnitude imaginable. But we also know that we can never escape the glare of John Wesley Powell's stern visage. Thirteen percent of the West is desert and most of the rest of it is arid. Water is scarce, distinctive, valuable. Yes, we can bring enough water to the cities for the new subdivisions but is this the wisest use and are we willing to bear the costs? The next century will bring different specifics than this one, but if we have learned any lesson, it is that from now on we must ask the question we never bothered to ask in water policy during the Big Build-up: we can do it, but is it worth it?

The changed social, environmental, and economic situation wrought by the population explosion since World War II has forced westerners to broach a topic that has never before been on the public agenda in the American West. Not just in Boulder and Santa Fe and the Willamette Valley and Seattle and California,

but also on the whole Colorado Front Range, the Valley of the Sun, the Wasatch Front, Reno, the Boise Valley, and across the rural west as well, the public is complaining, and loudly, about population growth, the watchful and insistent raven that now rides on the shoulder of the West.

We have already moved very quickly, in a matter of a few years, from a time when the subject of growth was taboo into a time of growth management. This era of planning and managing growth will be critical. Oregon and Washington have adopted statewide growth management systems. Many western towns and cities, and some counties, are experimenting with growth management. But land and water stress, the harsh statistics of exponential growth, and common sense tell us that we must inevitably move beyond growth management toward a time when we confront population stabilization.

We westerners must struggle to learn how to talk about population growth. Now, the essential dynamic is this. Some people use the term "no-growth." Many other westerners, sensible people, hear that term and, understandably, I think, hear: rigid, draconian, and immediate government regulation. In turn, many of those people -- fearing that the issue of population growth is a short, direct freeway to wrong-headed regulation -- deny that there is a problem. And so we talk past each other.

In fact, rampant population growth <u>is</u> a problem, a desperately serious and accelerating problem that is tearing away at everything the West is, but it cannot be solved by slogans like "no-growth." Nor, though some government action, especially

at the local level, will be needed, can regulation solve it. For there are profound and complex questions of economic opportunity; of economic, social, and racial equity; of personal choice of place and family; of our nation's historic commitment to leaving our door open to people from other nations; and many others. Further, all of these issues reach beyond the West to the rest of the nation and the world.

So population growth, of all issues, is not one for this day's slogans. It is one for a whole, long generation -- I pray that it is ours -- and all the diligence, patience, openmindedness, creativity, courage, and cooperation that we can muster. For this is an encompassing social issue that you can approach only piece by piece, in a thousand arenas or more, including such things as: walking the paper, and glass, and plastic out to the curb for recycling; adopting sensible local land-use planning; achieving coordinated state and regional planning, where appropriate; disseminating respectful family planning information the world over; and, perhaps most of all, engaging in open discussions over coffee and next-door fences and in public arenas over the very issue so that we can gradually build a civic and individual will to act.

For is it not our responsibility to act, even if it be incremental? Can we citizens of the West do again, in the next two generations, what we did in the two generations since the great War and still <u>have</u> the West? Is it not our calling to make this so-called New West a beginning of a true time, not so much of restraint, but also of civility?

The water community has always prided itself in taking the long view. Water and population growth have always been extricably entwined in the West, and always will be.

Have we taken the lead? Have we told the people straight and true that we can only squeeze the system so far and so long? That we can't grow indefinitely and still get all the things we want out of our rivers?

Have we told the public the truth about water supplies and population growth and 2025? About 2050?

Have we set out all the costs, tangible and intangible? Has the water community gone a step farther and explained that the costs for water cannot be isolated, that in trying to advise the public of the whole cost of growth that we must aggregate the cost of water with other growth-related costs, such as roads, schools, and prisons? Must not such information, on an aggregated basis, be available for policymaking if we are serious about achieving sustainability in the West?

Let me describe one proposal that exemplifies the kind of work we might do. A petition to Vice President Gore, endorsed by an impressive group of signatories, calls for a National Optimum Population Commission. The idea is to join together and gain some understanding of how many people the West can sustain -- or, variously put, what the carrying capacity or optimum population is. Surely such an effort, whether it encompasses only the West or it is a national study that squarely addresses the distinctive problems of this region, might lay an important part of the foundation for the future.

For in looking toward the future, our society is quite good at striving to provide the hard deliverables and the infrastructure -- highways, energy, water, minerals -- while we leave aside the softer, gentler, more intangible concerns of the years to come. Take a morning, the kind Bill Kittredge calls a bluebird morning, a beginning day of spring 25 or 50 years from now, a morning when the canyon wren of the Southwest desert is ready to sing her song, when the fragrance of sage is about to fill up the plains, when the salmon are poised to surge up the river. What legacy do we want to leave, or, put another way, how many options do we want to foreclose for those people? What do we want the lives of the people in our society to be like on a day like that? How crowded, safe, and healthy will their day be? How hectic? How happy for a child? And, fundamentally, though it is their time of year, their moment, will the wren and sage and salmon be abundant and healthy? Surely human population and its attendant costs will be key determinants in how those questions are answered.

A study of carrying capacity inevitably would be imprecise. Among many other things, the natural world is changing, and so is our technology, so that our estimates of carrying capacity would have to be regularly reviewed. Perhaps a study of carrying capacity would be only a rough cut, just as studies of our hard deliverables are. Still, the information would help give us a context.

Another aspect of coming to grips with population growth, in conjunction with information about carrying capacity, would be

for urban areas to develop alternative future growth profiles. Suppose metropolitan Phoenix builds out from 3 million people to 4 million. How will that be accomplished? What will be the costs for water and the rest of the growth-related infrastructure? What will be the costs if Phoenix builds out to 5, 6, or 8 million? Again, the estimates would be rough but they would be extremely useful: when laid against estimates of carrying capacity, they would surely influence growth management decisions and help educate the people.

We assert that we are determined to achieve sustainability. Sustainability, however defined, is a function of the vitality of natural systems; human population; and the rates of human production and human consumption. How can we pretend to be seeking sustainability without accounting for the number of people who will be producing, consuming, and impacting natural systems?

It is my belief that we may be in the beginning stages of addressing population stabilization. We are now discussing growth. Societal action always begins with a societal discussion.

Once the context is understood, actions will follow. The largest sphere of progress will be in individual actions, as a new ethic takes hold. Government action will be less important. We are a practical people and proposals involving sterilization,

legal limits on the numbers of children a person can bear, and euthanasia for the elderly run contrary to deeply-held moral values and are excessive. Rather, my guess is that the main roles for formal law will lie in creating tax disincentives for population growth; reducing but not eliminating immigration; and adopting sensible local, regional, and state growth management practices so that human population levels will be consistent with sustainability in this arid land.

But we should accelerate the discussion and resolutely move toward action. We fool ourselves if we abdicate and say that population growth will come anyway, that "you can't stop growth." Much to the contrary, population stabilization absolutely will come. The only questions are when, under what circumstances, and whether we choose to influence the outcome.

You can see some hopeful signs in terms of action as well as discussion. Americans are voluntarily having fewer children. So are people in many other nations. The recent local and state growth management efforts are encouraging. So are the open, collaborative approaches toward resolving disputes over water, always the West's toughest resource issue. All of these efforts demonstrate the burgeoning interest in what we call sustainability but what is really just an elemental civility toward ourselves and the land and waters that give us so many different kinds of sustenance.

Perhaps, above all, we are beginning to understand that 50 years ago, the end of the Great War, or 100 years ago, when the century broke across Phoenix, was a short time ago and that 25,

50, or 100 years in the future is a short time away. We need to try, in our own small ways, to take concrete steps to fulfill obligations that have fallen to us to see that the western landscape and the human spirit here, here in this sacred place, will flourish during the many years to come.

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