

Introduction

As a student of water resources, I am interested in how communities can manage their water resources in a way that will protect the water supply for the long-term benefit of the community. While reading *Asset Building and Community Development*, I found sources on several subjects that tie into this larger concern: environmental sustainability, community sustainability, and political capital. In class we frequently use the term "smart growth"; I wanted to learn what that means, specifically, so I read two articles, "Smart growth: Why Local Governments Are Taking a New Approach to Managing Growth in Their Communities" by Maryann **Froelich**, and an article by Anthony **Downs**, "Smart growth, Why We Discuss It More than We Do It." Froelich describes the benefits of smart growth, while Downs explores obstacles to its implementation.

Another buzzword is "sustainability." **McHarg's** *Design with Nature* is an early articulation of the interdependence of the human and natural environments. Three works that helped me to understand the challenge of defining sustainability and implementing it are: an essay by **Hempel**, "Conceptual and Analytical Challenges in Building Sustainable Communities," in *Toward Sustainable Communities: Transition and Transformations in Environmental Policy; Planning for Sustainability: Creating Livable, Equitable, and Ecological Communities*, by **Wheeler**; and *Natural Capitalism: Creating the Next Industrial Revolution*, coauthored by **Hawken, Lovins, and Lovins**. The last provides a sampling of ideas and technologies that stem from an awareness of the importance of resource management.

A difficult problem is how to effect the structural and attitudinal changes needed to implement smart growth and environmental sustainability ethics. I read works on the dynamics of power and political change: **Alinsky's**, *Rules for Radicals: A Pragmatic Primer for Realistic Radicals*, since he is the father of political activism; and the 1953 classic by **Hunter**, *Community Power Structure: A Study of Decision Makers*. Finally, **Wood's** *Faith In Action, Religion, Race, and Democratic Organizing in America*, a contemporary work on the subject that addresses the intersection of religion and political activism. Social change is not only the result of direct political action, but also responds to other social and technological trends. In *The Rise of the Creative Class*, **Florida** examines changes in the structure of human relations and work due in part to technological changes. Albuquerque received high marks from Florida as a "creative class" city, which gives me hope that we can become a leader in the kinds of sustainable planning and development that the above works suggest, especially with regard to water management.

Froelich, M. (1998). Smart growth: Why Local Governments Are Taking a New Approach to Managing Growth in Their Communities. *Public Management*, 80(5), 5.

Froelich explores the developing enthusiasm for "smart growth" among city planners and others with a stake in the shape of urban communities. The smart growth approach reflects a number of concerns, including: a) desire to restore center cities and older suburbs; b) realization that "sprawl" development produces long-term negative consequences; c) demographic shifts; d) a variety of fiscal concerns; and e) a high value on environmental care. Players that had previously fought for conflicting goals are frequently finding that they actually share many values of the smart growth constellation. The most common thing that developers, environmentalists, affordable housing providers, and alternative transportation advocates agree on is the need to facilitate smart growth development through changes in zoning and permitting, and financing criteria. Froelich calls on local governments to work to remove barriers and provide incentives to those who would engage in smart growth.

Froelich's article provides a quick overview of the principles of smart growth, many of which are also embodied in the master plan for Mesa del Sol. Several of the principles have relevance for water conservation, for example, promoting denser development with smaller yards is one method for reducing residential consumption rates. But the "growth" part of smart growth means that demand for water is likely to continue to increase. Also, residential consumption is only part of the equation of increasing urban demand for water. In the desert, it's also important to be planning for reduced municipal and industrial demand.

Downs, A. (2005). Smart growth, Why We discuss It More than We Do It. *Journal of the American Planning Association*, 71(4), 367-380.

Downs examines obstacles that prevent smart growth principles from being widely implemented. Although appealing to many in the abstract, when it comes to making the needed changes, people often fear the impacts. Smart growth will change the costs and benefits to developers, land owners on the periphery of cities, and home owners near areas where lower cost, higher density building may take place. In order to be effective, smart growth principles must be implemented at a regional level, so that development doesn't simply skip over the rezoned areas. But regional, state, or multi-state land use planning would shift political control away from local governments, who are thus resistant to such policies. Downs has identified 8 categories of obstacles and associated them with 9 smart growth policies. Based on this analysis, he makes a qualitative assessment of the likelihood of each policy to be implemented. He rates "providing for more mixed land uses and pedestrian-friendly environments," "loading public costs of new development onto residents of growth areas," and "adopting more diverse regulations on aesthetics, street layouts, and design" as likely to be implemented, while "limiting outward extension of new developments" and "raising densities in both new-growth and existing neighborhoods" are very unlikely. He concludes that state-level intervention would be necessary for smart growth policies to be adopted widely.

Taking a moment to consider Downs' assessment of likely and unlikely implementations of smart growth and apply them to the planned Mesa del Sol development, I see that the plan incorporates the "likely" principles as well as, to some extent, one of the "unlikely" principles: raising housing densities. This is only partially true, because the development will also include high-end, large lot houses. It fails to implement the other "unlikely" principle: limiting outward extension of new development; the development will use up "undeveloped" land on the edge of the city. While Albuquerque continues to experience a growing population, it is true that some growth is inevitable. But how much, and what kinds of, growth are sufficient to the long-term health of our community?

McHarg, I. L. (1992). *Design With Nature*: John Wiley & Sons, Inc.

At the advent of the environmental movement, Ian McHarg published this book about what he decided to call "ecological planning." His premise is that humans are a part of the natural world and that human settlements should be designed to fit into the environment they are a part of. Form does not proceed from function, but rather, the two emerge together. Where the form does not fit the ecology of which it is a part, the result is a less than optimum situation and existence; many times, the result is a project that will collapse under the weight of its incompatibility with what surrounds it. McHarg presents several examples and shows how the natural setting can and should influence the outcome. For example, he contrasts the approach to development along the dunes of the Jersey shore with the way that dunes are protected on the coast of Holland. Well-cared-for dunes protect the inhabitants from floods and storms; when their importance is disregarded, the dunes disappear and leave coastal inhabitants vulnerable. At the end of the book he discusses a study of an unnamed city which overlaid mapped incidences of various diseases (physical, mental, and social), as well as pollutants and population density, to identify correlations between health and environment. An initial finding was that disease correlated highly with population density.

This book makes me wonder about a number of things. First, how much does the smart growth strategy (or other contemporary planning strategies) take into account the specifics of the location in which a development is planned or managed, i.e. how might the natural location of the proposed Suncal development lead to a different kind of plan from the proposed Mesa del Sol development? For example, at Mesa del Sol, the park corridors have been designed to allow water to run off to its customary place in the lower southeast corner of the development. Second, has research been done to show what sorts of social and health changes result from higher density development? If the changes are predominantly negative, how can they be ameliorated? Third, what does McHarg's recommendation about building "with nature" have to say to us about the advisability of continuing to increase population in the fragile desert environment in which Albuquerque is located?

Hempel, L. C. "Conceptual and Analytical Challenges in Building Sustainable Communities." Toward Sustainable Communities: Transition and Transformations in Environmental Policy (1999).

Hempel wrestles with the juxtaposition of two fuzzy concepts: "community" and "sustainability," asking at what order of magnitude and what timeframe they are best considered. Further, how to implement the resulting ideal of "sustainable community." To create a "sustainable community," however defined, requires interdisciplinary approaches to problem solving and policy development; and this fact increases the difficulty of achieving the needed changes from a political viewpoint. Hempel identifies four "clusters of sustainability approaches," each of which is favored by a different discipline: 1) natural capital, favored by ecological economists, 2) urban design, favored by architects and local planners, 3) ecosystem management, favored by natural resource managers, and 4) metropolitan governance orientation, favored by regional planners. He suggests that communities come up with indicators to measure progress, but notes that the measures the average citizen supports may be quite different from what professionals would prefer.

Hempel asks an interesting question which I had never considered: when one says "sustainable," what timeframe does that mean? Are we trying to create a community that will endure for millennia? Several hundred years? A generation? This is an important question as regards water planning. As I learned in water law class, where a groundwater source is rechargeable, the Office of the State Engineer generally caps use at the rate of recharge (when this is known). But in some cases, a groundwater source doesn't get recharge and all use leads to depletion of the source. In Lea County, the decision was made to allow use at a rate that would deplete 2/3 of the source within 40 years. What the residents are supposed to do after 40 years is not discussed. In Arizona, builders are now required to show a 100-year water supply before building. In my opinion, neither timeframe qualifies as "sustainable," although I would be hard-pressed to name a timeframe and give a rationale for that particular timeframe.

Wheeler, S. M. Planning for Sustainability: Creating Livable, Equitable, and Ecological Communities. Routledge, 2004.

Wheeler dares to make use of the slippery term "sustainability." He discusses the history and evolution of the concept and explores various definitions of the term. Next, he situates sustainability within the evolution of planning theory, tracing the development of various planning theories: rational comprehensive theory, neo-marxist planning, participatory and communicative planning, advocacy planning, theories of urban social movements, and institutionalism. Coming to sustainable development, he explores its relationship to economics, the environment, and equity, and concludes that a theory of sustainable planning must address all three areas in order to achieve a sufficiently holistic approach. In the second half of the book, Wheeler discusses the opportunities and challenges of integrating sustainable planning at various levels: international, nations, state and provincial, regional, local governments, neighborhood, and site planning. Since incorporating sustainability into planning is a relatively new idea, he warns readers to expect resistance, and to adopt a strategic and patient approach to integrating this idea into various contexts.

As a society, we're only beginning to come to terms with the limits of natural resources. North Americans have been in the enviable position for several hundred years of having access to vast, untapped resources. What are we going to do when we come up against the limits of nature's bounty? There is only so much arable land: it can be used to grow food or fuel crops. There is only so much water, and there is a minimum limit to the amount of water that will sustain a person and the natural environment. Given that on the macro scale unending growth is not possible, how can we develop processes and economies that recognize and respond to natural limits? We would do well to consider other societies, for example Western Europe, and study their approach to supporting their population with more modest (and carefully husbanded) land, forests, and other natural resources. I wonder whether their more limited situation has any bearing on the tendency of European countries to rely more heavily on central or national government policy and oversight.

Hawken, P., A. B. Lovins, and L. H. Lovins. Natural Capitalism: Creating the Next Industrial Revolution. Little, Brown and Company, 1999.

Capitalism typically accounts for human, financial, and manufactured capital in its costing of production. In this book, the authors propose an alternative that takes into account the cost of resources, living systems and ecosystem "services", which they call *natural capital*. An ecosystem service is a function provided by the environment such as purifying water through the precipitation cycle. As human uses approach the limits of the planet's resources, systems degrade if not properly managed. A new approach to the use of resources is needed that will increase the benefit per use of resource, called resource productivity. During the industrial revolution, new machines increased the productivity of workers exponentially; so, during the next phase of development, capitalists need to find ways to increase the productivity of the resources as they are used. This can be accomplished by studying the inefficiencies of manufacturing processes and making changes. It can be accomplished by imitating the ways that natural cycles take advantage of the waste products of one process to use them as inputs to the next process. The authors devote several chapters to presenting case studies illustrating the principles in a variety of contexts, including the noteworthy case of Curitiba, Brazil.

Gardeners are familiar with the concept of companion plants, for example, tomatoes and basil. Planting them together causes each plant to do better, whether because of pest control characteristics or nutrients added to the soil by one or the other plant. A buzzword at Sandia National Laboratories is the "energy-water" nexus, which refers to the cross-constraints of each resource: producing energy requires water; pumping and processing water requires energy. In what ways can thoughtful planning help situate municipal and industrial activities so that waste products of one process can become resources for another process? For example, building electrical generation plants near wastewater treatment plants allows the power plant to take advantage of the energy potential in water, use it for cooling, etc. As Albuquerque seeks to attract new business, can it identify "companion industries" that benefit each other?

Hunter, F. Community Power Structure. University of North Carolina Press Chapel Hill, 1953.

Hunter's study of the power structure of an American city of half a million continues to be a classic, despite having been undertaken over 50 years ago. Through interviews and surveys, Hunter developed a 3-tier structure to describe the degree of influence held by various individuals: 1) upper limits power personnel, those who set the agenda for discussion and have most to say about policy, 2) lower limits power personnel, who contribute to the conversations set by tier 1, and 3) under structure personnel, who participate in implementation, but have little voice in the direction of policy. He categorized individuals according to their role in one or more influential institutions or associations: economy, government, religion, education, professional associations, civic associations, and cultural associations. He highlights the disconnect between the average person and those who really hold influence, commenting that the actual process does not take place along lines that most would recognize as "democratic." On a more hopeful note, he opines that while the individual has limited influence, if he (or she) is aware of the power structure, he can influence who is given the nod to determine the policies that affect the average person.

Hunter's message is that in every community there is a visible power structure, but real power is exercised by a few people. I believe this is generally true. This leads to the idea that in order to change policy, it is necessary to identify those who really hold the power, and choose how to act with this in mind: either cooperatively or confrontationally. With regard to Mesa del Sol, who can actually give that company the green light or red light? Who will shape the conditions of their contracts, e.g. TIDDS? Who is able to stop them, and how would they do that?

Alinsky, S. D. Rules for Radicals. Vintage Books New York, 1971.

An organizer and student of the labor movement since the 1930s, Alinsky articulates his approach to developing power among the "Have-nots" which can force the hand of the "Haves." The principles that worked for the labor movement apply equally to the civil rights struggle, the Vietnam war resistance, and any other populist movement. He writes of the importance of building an organization that speaks to a variety of issues, in order to attract as wide a base as possible. He points out the need to understand the mindset of your own people as well as the opponent when choosing tactics, in order to maximize your team's enjoyment of the tactic while putting the opponent out of balance. As he understands it, ethics and morals most often serve to bolster the status quo, but are window dressing to the dynamic of power, that will be jettisoned as soon as they become inconvenient. He cautions would-be organizers to beware of getting caught in their own rhetoric or that of anyone else, and to keep their eyes on the bouncing ball of power. The effective organizer will be alert for serendipitous opportunities and exploit them to advantage.

Hunter studied a community's power structure and reflected on how to influence events from within it. By contrast, Alinsky advised the reader how to confront the establishment and make it bend to a new way of doing things. The challenge for those who would influence a community is deciding which approach will yield the greater long-term effect--or, to put it another way, which approach is more sustainable (!). For those who are truly outside the established power structure, as for example communities of color often are, Alinsky's confrontational approach may be necessary.

Wood, R. L. Faith in Action: Religion, Race, and Democratic Organizing in America. University Of Chicago Press, 2002.

Wood studied two approaches to democratic organizing in multiracial communities in Oakland, California: faith-based and race-based, assessing their strengths and prognosis for impact on behalf of their communities. He finds that, in contrast to Castell's pessimistic conclusion about the potential of reform efforts, nonpartisan faith-based community organizing evinces greater effectiveness in addressing the concerns of socially and racially marginalized groups than the purely race-based organizations. An important difference lies in the kind of social capital available to each organization. Wood is careful to distinguish the type of faith-based organization that he is describing. It is not a group of citizens who happen to be religious, but neither is it direct intervention by religious institutions in the political workings of the state. Rather, it is an organization which makes a place for religious dialogue and also recognizes nonreligious dialogue as legitimate. However, faith-based democratic organizing faces several limitations. First, it would be difficult to address highly controversial issues within the constituent communities, for example, the abortion debate. Second, while such organizations are effective at bringing together people across racial and socio-economic divides, there is a danger that concerns and interests of the less privileged will be overshadowed. Third, these organizations must walk a delicate balance between cooperation with and confrontation of political leaders in order to effect change.

Both types of organizations studied by Wood serve as expressions of community and tools for community-building in urban communities. It is a positive thing that such organizations are cognizant of the balance between cooperation and confrontation with the established power structure. On the other hand, given the economic changes that our country is undergoing (I refer to globalization), the need for an organized populist voice is as urgent as it ever was, and not just among the poor and ethnic minorities. Wood's finding that the faith-based community organizations can be effective politically gives me hope, because I believe in the power of faith-based communities to provide for the well-being of people on many other levels in addition to this political one. It also encourages me to find ways to integrate faith-based convictions with environmental values.

Florida, R. L. The Rise of the Creative Class: And How It's Transforming Work, Leisure, Community and Everyday Life. Basic Books, 2002.

Florida studied economic and demographic trends that signal the flourishing of certain urban centers while others decay at the start of the 21st century. He makes sense of them by proposing that economies are revved up by innovation, and that innovation is most commonly exhibited by those in a cadre of creative occupations. Prosperity correlates better with the influx of creative people rather than profitable businesses. Florida examined what is attractive to these groups and identifies individuality, merit, and diversity and openness. He developed several indices by which to measure attractiveness and openness to innovation. Two that he found to be particularly accurate predictors are the bohemian index, a measure of the ratio of "artistically creative" people, and the gay index, a measure of the level of coupled gay people. These indices point to a culture that is open to innovation and likes creative diversity. Florida found that creatives tend to prefer relationship networks predominated by weak social ties, unlike the traditional communities in the past.

Florida's work touches on contemporary changes in the shape of communities. They are increasingly mobile, provide less opportunities for long-term relationships, and less stable employment. Attracting the creative class may be beneficial for a region as a whole, but the benefits often don't trickle down to those at the lower end of the social and economic scale. Racial minorities, particularly African-Americans, are noticeably absent from this creative class. The trend is toward polarization between the creative "Haves" and the "Have-nots," who tend to be trapped in working class and service jobs. The affinity of the middle and upper classes to creative jobs is not hard to understand when considered in light of Maslow's hierarchy of needs. Those from economically secure backgrounds can pursue the education that enables them to find "creative" work; and can afford to take the financial risks inherent in the super-creative artistic occupations. But, finding ways to tap the creativity of the "Have-nots" has the potential to improve both their individual economic and social situation, and the U.S. economy as a whole over the long term. Florida's work could be extended to explore how to launch the underprivileged into the creative class.