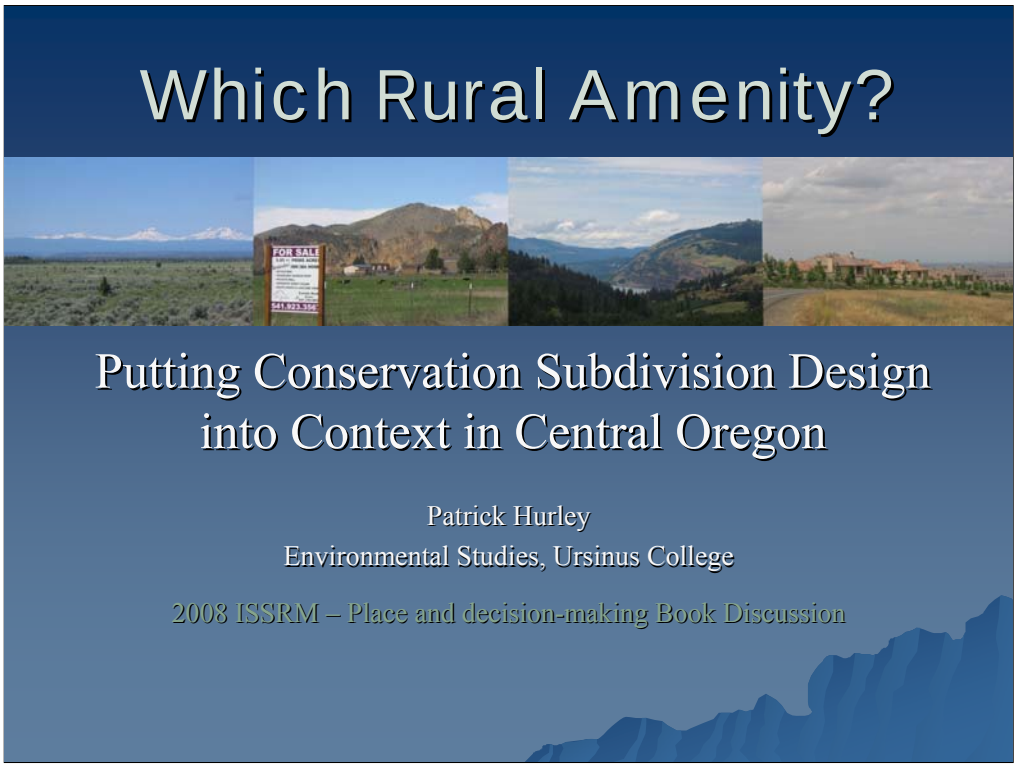
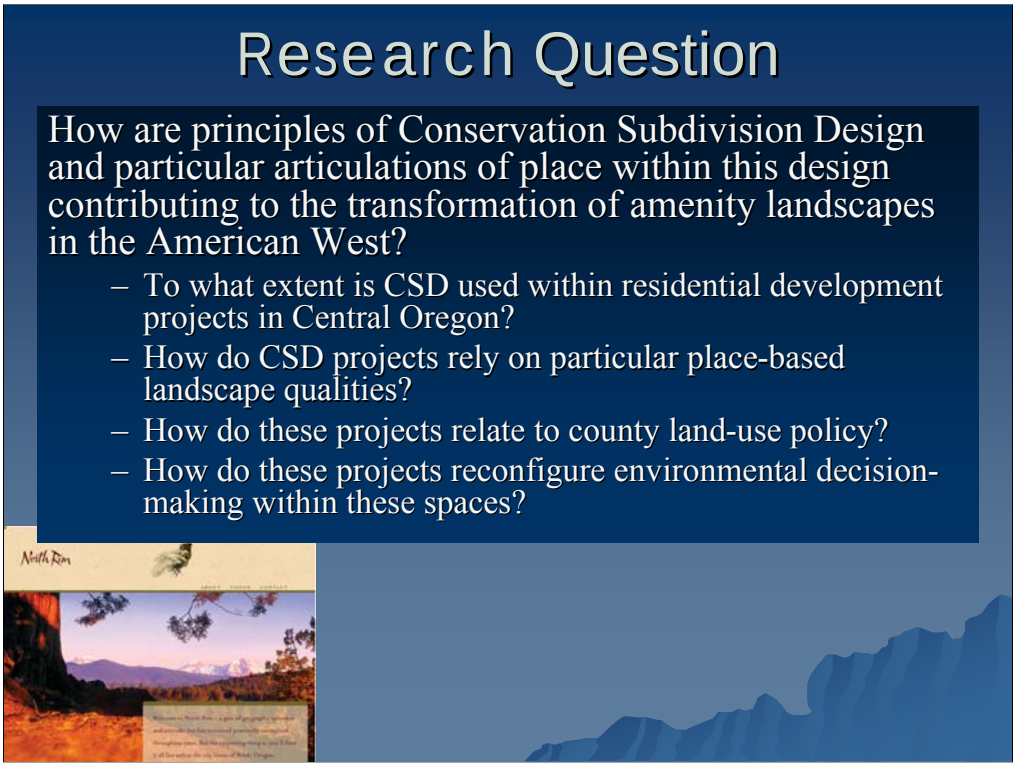
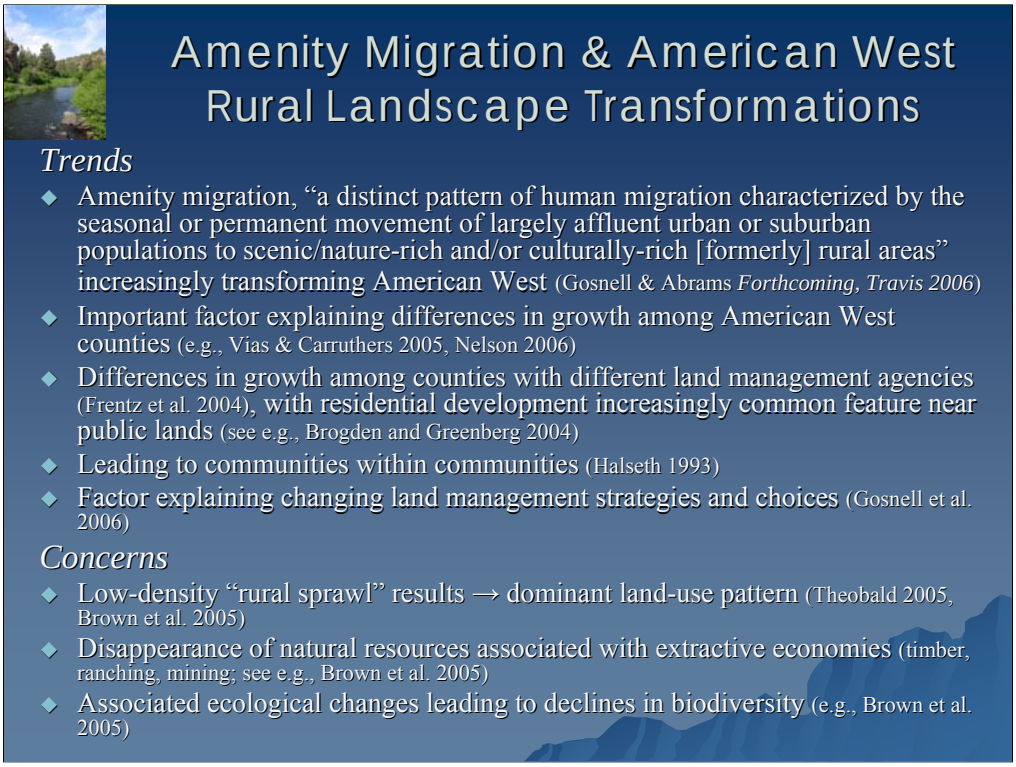


"Conservation subdivision design" (CSD) has emerged as an alternative model for land development in urban *and* rural areas. First, this development alternative is believed to reduce the impacts of sprawl—whether in its suburban or rural forms—on sensitive environmental resources (e.g., biodiversity, natural habitats, wetlands, riparian areas) and natural resources (e.g., agricultural land, timberlands, grazing lands) and to contribute to achieving wider conservation goals and protecting natural amenities in developing areas. Second, is not solely a phenomenon in urban places, but is also used in rural areas. It represents an alternative to *both* lower-density residential development that fragments productive rural resource lands *and* conventional suburban-style developments that result in the conversion of open space in urban areas and productive lands on the fringes of expanding urban areas (Arendt 1996, 2004; Austin and Kaplan 2003). Thus, CSD is both a potential product of, and contributor to, the blurring of rural-urban distinctions. Third, CSD often means that local communities, either on their own or in conjunction with local not-for-profit organizations (e.g., land trusts), will manage protected resources within their borders and advocates of this model sometimes imply that it will increase support for conservation. For example, research by Kaplan and Austin (2004: 236) from Michigan indicates that residents of these developments are more likely to support forest, wetlands, or open meadow conservation because these areas are seen as "integral, community owned parts of the overall development." Yet few studies have sought to understand conservation subdivision in context, tracing the relationship of specific projects to particular patterns of amenity migration and exurbanization, the divergent design components that make it into particular designs, or the interrelationship of these for governance mechanisms and the on-the ground environmental management.



In the spirit of work by Bjelland and co-authors (2006) on "the production of suburban alternatives," this paper seeks to explore how newly developed spaces come to be and the role that developers, place-based qualities, and concern about conservation play in creating particular alternatives to both broader exurban *and* suburban patterns of growth. To achieve their land conservation goals, CSD projects ideally feature at least five specific design elements. altering the layout of lots (pattern of development) to avoid areas that are deemed to have conservation value, without reducing the overall number of the lots; limiting lots sizes and, often but not always, clustering lots together to increase 'open space' and to conserving portions of the site as "recreational amenities," "working landscapes" and/or "natural areas"; ensuring conserved areas cannot be further developed, by using such instruments as deed restrictions or preferably working with a local land trust to place a conservation easement on the open space ; and encouraging ecologically appropriate interactions by residents with these areas through governance mechanisms, such as design guidelines or Covenants, Conditions, and Restrictions (CC&Rs)(see e.g., Arendt 1996, Theobald et al. 1997). Thus, I examine the types of natural amenities and conservation spaces that have been incorporated within "subdivisions" in the Eastside Cascades of Oregon, the design elements and broad governance structures that seek to manage these amenities or spaces, and the ways these emerging conservation landscapes relate to amenity migration patterns in the two counties.

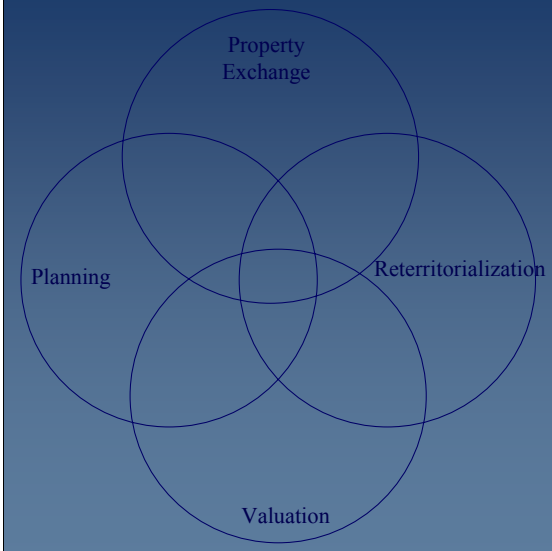


I situate my work within the broader literatures on amenity-migration (see e.g., Shumway and Otterstrom 2001, Smutny 2002, Nelson 2006, Moss 2006) and draw insights on ecological concerns from the closely related literature exurbanization in the American West (see e.g., Duane 1999, Walker and Fortmann 2003).

Political ecology and Place

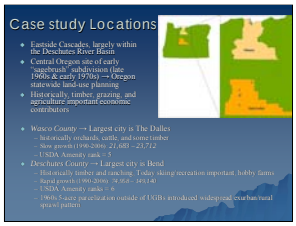
- Explores the social-political complexity of *changing human-environment interactions*, by combining "the concerns of ecology with a broadly defined political economy" to emphasize role of *power* in *producing* and *defining* environmental change (Peet and Watts 2004, Robbins 2003)
- Place *meanings* result in expectations of appropriate *behavior* and determine *legitimacy* of *everyday practices* in environmental conflicts (see e.g., Peet and Watts 2004)
- Proliferation of new environmental management schemes, including a pervasive use of land-use zones and associated practices that "contain in space" the practices of humans (Zimmerer 2000, 2006)
- Neoliberal/economic restructuring important driver in *both* environmental change and the creation of new environmental management schemes (see e.g., Heynen et al 2006)
- Recent comparative work from Canada, *still rather uncommon within political ecology*, has attempted to explain uneven environmental management → intersection of regional environments, regional economies, cultural change and continuity within particular places, and forms of governance and institutional capacity (Reed 2007)
- Conflicts over new ideas about environmental governance, including within planning for private land and on appropriate uses of public lands, common among areas experiencing amenity migration (Hurley and Walker 2004, Brogden and Greenberg 2004, Robbins 2006)
- Walker and Fortmann (2003) identify landscape qualities as central to conflicts among the competing rural capitalisms in Nevada County, CA, an area experiencing amenity migration and the attendant rural sprawl that is seen as characteristic of recent trends in the American West.

Conceptual approach



Reed, M. Uneven environmental Management (2007)

- Reed (2007) identifies the overlapping center as the space of changing environmental governance and associated decision-making
- But we can also use this to better understand how particular place-based (landscape) qualities are captured (valued) as amenities residential development projects



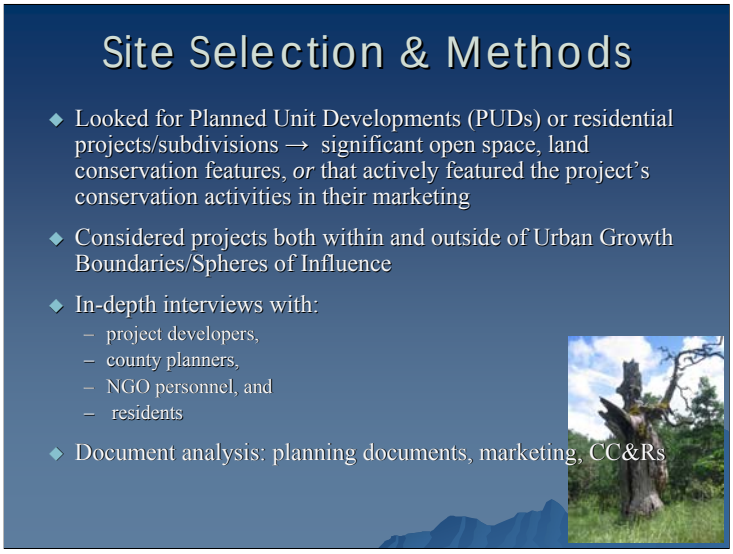
Growth and development trends in Oregon's amenity-rich Cascades

While Deschutes and Wasco counties share many important natural amenities associated with communities experience rapid growth, the two counties' experiences with development are quite different. Both lie on the eastern slopes of the Cascade Mountains, and include significant stretches of the Deschutes River, a significant tributary to the Columbia River that is renowned for its fly-fishing (Deschutes River Conservancy 2007). Importantly, Deschutes County scores slightly higher on the USDA's natural amenity index (McGranahan 1999).[1] The rate of growth in the county appears to reflect this; Deschutes County is home to the City of Bend, Oregon's fastest growing metropolitan area over the past seven years and one of the fastest growing metropolitan areas in the U.S. (U.S. Census Bureau 2007a). Bend's tremendous growth has been fueled, in large part, by its close proximity to the Mt. Bachelor ski area[2] and an abundance of sunny days (McGranahan 1999). In contrast, Wasco County also lies on the eastern flanks of Mt. Hood, but has considerably fewer hours of sunlight than Deschutes. Perhaps more importantly, Wasco County's major metropolitan area, The Dalles, and its outlying rural exception areas largely have been overshadowed by rapid amenity-related growth in, and around, the towns of Hood River and White Salmon (Washington), which sit across the Columbia River from one another and have been a revered site of windsurfers the world round.[3] Thus, the county has seen much lower population growth (U.S. Census Bureau 2007b) and a, to date, a smaller influx of retirees and second home buyers.[4],[5] Only recently has the northern part of the county begun to see the type of property acquisition that is characteristic of neighboring Hood River and Klickitat counties (Hood River and White Salmon respectively).[6] Its growth and level of development has yet to approach anything like that experienced by Deschutes County.[7],[8]

At the same time, Deschutes and Wasco counties' land-use change histories share important similarities, even if the scope of these changes is not directly comparable. In many ways, the emergence of the Oregon land-use planning system was a response to rapid partitioning of rural parcels in the southwestern portion of the Deschutes County (CITE).[9] By the time the state had created the planning system, a large degree of rural subdivision had occurred, a fact that the system recognized through the creation of the so-called "rural exception areas"[10],[11]. In the years it would take Deschutes County to finalize a county-wide planning document, five-acre parcelization would come to dominate many rural parts of the county, both because five-acre minimums became the preferred mechanism to stop parcelization in the meantime and given the early demand to create parcels for later sale and/or development.[12] Similarly, portions of northern Wasco County experienced pre-1973 parcelization and land speculation.[13],[14] albeit to a much lesser extent than in Deschutes. It is within these geographic and historical contexts that much rural land development in both Deschutes and Wasco has taken place.

As Deschutes County's (Bend's) growth has continued to skyrocket, there has been growing concern over the ability of agricultural and timber land-owners to maintain economically viable operations. Likewise, conservation groups, such as the Deschutes Basin Land Trust and the Deschutes River Conservancy, among other statewide and national groups have expressed the need to expand efforts to: protect critical wildlife and natural habitat characteristic of high desert terrestrial habitats (e.g., sagebrush steppe, native grasslands, and Ponderosa pine forests); increase instream flows for fish in the Deschutes River and its tributaries; and to retain working forests and farms in the region (ODF 2006a, 2006b).[15] And although growth has been much less pervasive in Wasco County, the county's northern areas are home to limited-range habitats and tremendous wildflower diversity, within which much of the early rural parcelization took place.[16] Thus, concerns about the impacts of rural sprawl on Oregon white oak-Ponderosa pine woodlands have been focal points of discussion when it comes to the area's conservation and environmental management (OBP 1998; ODF 2006a;).[17],[18] Increasingly, too, the some residents are even worried about the implications rural residential growth might have for the northern county's cherry growers.[19]

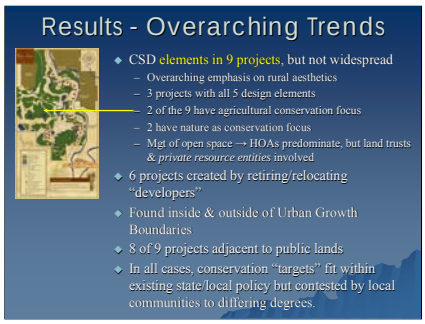
[1] The USDA natural amenity index measures variables associated with an area's climate, topographic diversity, and the presence of public lands. For a fuller description, see McGranahan (1999)., [2] Interview A, Bend, OR 6-12-2006, [3] Interview B, Mosier, OR 5-31-2006, [4] Interview B, Dotty DeVaney, Mosier, OR 5-31-2006, [5] Interview C,The Dalles, OR 5-31-2006, [6] Interview B, Mosier, OR 5-31-2006, [7] Interview B, Mosier, OR 5-31-2006, [8] Interview C, The Dalles, OR 5-31-2006. [9] Interview A, Bend, OR 6-12-2006, [10] Interview A, Bend, OR 6-12-06, [11] Interview B, Mosier, OR 5-31-06, [12] Interview A, Bend, OR 6-12-06, [13] Interview C, The Dalles, OR 5-31-2006, [14] Interview B, Mosier, OR 5-31-06, [15] Interview D, Bend, OR 6-9-06, [16] Interview B, Mosier, OR 5-31-06, [17] Interview E, Hood River, OR, 6-15-06, [18] Interview F, Vancouver, WA 5-30-06, [19] Interview G, Mosier, OR, 6-8-06



Study sites within the two counties were selected using two criteria. *First*, potential sites were identified through discussions with county land-use planners, local land trust personnel, developers who indicated other candidate projects, and using internet real estate searches. Because very few communities describe themselves using the "conservation subdivision" moniker, I asked key informants whether there were any Planned Unit Developments[1] or residential communities/subdivisions in the county, which included either significant open space conservation features *or* that actively featured the project's conservation activities in their marketing. Importantly, I eliminated so-called "resort developments" from consideration, largely given the different planning criteria that are used to evaluate these projects *and* significant differences in property ownership and visitor use. *Second*, I attempted to find communities both within and outside of Urban Growth Boundaries. I also wanted to identify potential projects on the rural-urban fringe *and* capture potential differences in project design as one moves away from existing urban areas. Indeed, one prominent feature of conservation subdivision design, according to some critics (see e.g., Daniels 1997, McCallister 1999), is the fact that this design approach unnecessarily brings the urban into rural areas (Hurley, unpublished manuscript). Mirroring this perspective, as Bjelland et al (2006) discovered, some urban jurisdictions see CSD as a potentially inappropriate policy because it promotes inefficient rural densities within an expanding urban area.

Once potential cases were identified, I reviewed project proposal documents, county planning documents associated with each case, marketing materials (i.e. real estate brochures and websites), and the governance documents for each of the communities that had these materials. I created an inventory of their design features, conservation goals and features, and governance features as they related to conservation and environmental management goals. Likewise, I interviewed current and former planning officials, project investors/developers, representatives from conservation organizations in the communities where the projects were proposed, including from organizations oppose to particular projects (where appropriate) and from organizations associated with design features (i.e. land trusts holding an easement). In general, I was interested in understanding the ways in which various actors talked about specific projects and the role of place, their design features, relationship to local development trends, and their role in addressing particular conservation issues in the area. In addition, I provide the results from a rather simple adjacency/proximity analysis of the relationship of projects to "protected lands," using public lands and significant properties located nearby that have conservation easements on them, as a surrogate.

[1] Planned Unit Development refers to a type of project that often deviates from common land-use patterns and is the mechanism through which many CSD projects have been proposed elsewhere (Bjelland et al. 2006)

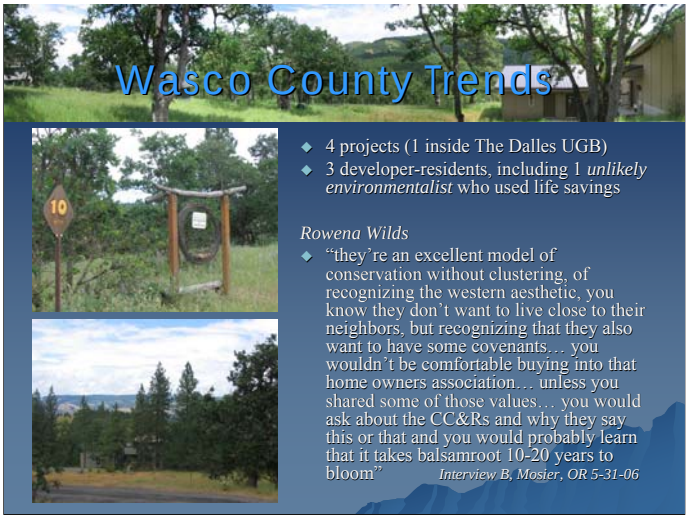


Designing, Consuming, and Governing Subdivided Nature

Conservation subdivision design is not a widespread phenomenon in the case study areas,[1] although usage of its elements is significant among subdivisions proposed within Wasco County over the past decade.[2] However, I identified nine projects that incorporated various elements associated with this approach to land development (Figure1, Table 1). [3],[4] It is important to note at the outset, however, that these projects are at differing states of the development process: ranging from built out to construction in progress. In a couple of cases, lots are still being sold or held for future home construction by their current owners. Yet, some interesting inferences about the state of conservation development within these areas can be made. Looking at these projects, both counties have seen the construction of projects that employ elements of CSD, even if these design features are not in widespread usage. Examples were found both inside and outside of UGBs (Table 1). Deschutes County has a greater number of these development projects, and not surprisingly given the higher rates of growth, these projects are quite a bit larger.

Whether in Wasco or Deschutes counties, each project is designed to attract buyers with communities comprised of single-family homes. It's also clear, from the interviews with both planners and developers in the two counties, that the Deschutes projects differ rather dramatically in terms of price, even when one takes into account overall differences in the price spread of the two areas.[5],[6] While most of the projects had been designed and built within the past two decades, one project in Wasco County had been undertaken in the 1970s by the developer as way to create his own retirement community. [7],[8],[9] In fact, the relationship between development projects and the ability of individual developers to literally create the type of community where they wanted to live (or retire) was a recurrent theme. Of the nine projects, six of the communities are also home (or were home) to the individuals who helped design and implement them. When commenting on this relationship, one former county planner even suggested that "we wouldn't need land-use planners if every developer lived in the developments they did."[10] This planner went on to discuss how when a "landowner comes in and buys and wants to create the community that they're going to retire in, they're already looking to do all the things that we try to do by ordinance and they wind up doing it through HOA, and covenants, and lease back options, and you know, all these other tools that we can't really regulate very readily…"[11]

[1] Interview K, Phone interview, 9-8-06, [2] Interview B, Mosier, OR 5-31-06, [3] Interview A, Bend, OR 6-12-2006, [4] Interview B, Mosier, OR 5-31-06, [5] Interview A, Bend, OR 6-12-2006, [6] Interview C, The Dalles, OR 5-31-2006, [7] Interview A, Bend, OR 6-12-06, [8] Interview C, The Dalles, OR 5-31-2006, [9] Interview L, The Dalles, OR 6-14-2006, [10] Interview B, Mosier, OR 5-31-06, [11] Interview B, Mosier, OR 5-31-06



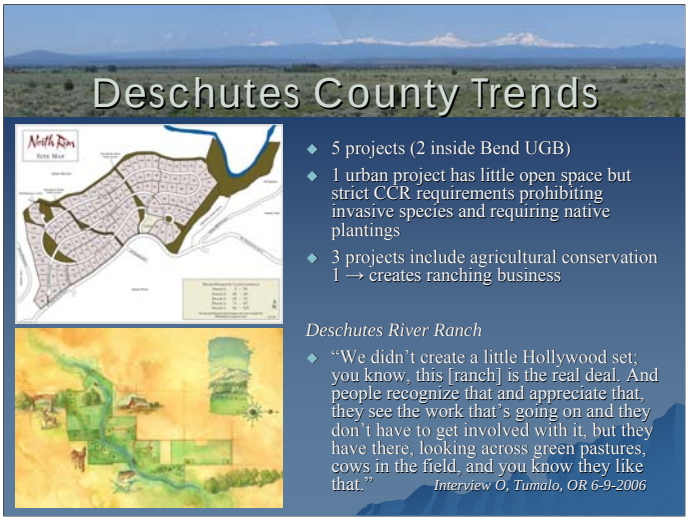
Two projects within the case study stand out for the interesting ways they highlight links between amenity-migration, the use of conservation design elements, and the importance of place. First, Rowena Wilds highlights the tensions between amenity-migrants who are concerned about development and its impacts, but only reluctantly take the personal risk to develop something differently. Second, Deschutes River Ranch highlights the ability of local residents with some investment capital and a bit of experience to create a project that creates both a space of conservation and a potential agricultural business. Both, however, reinforce the extent to which place-based qualities are mobilized by these developers to create residential spaces that are appealing to amenity migrants, but in ways that suggest differing approaches to site-based environmental decision-making.

Rowena Wilds is very much the product of one person's desire to ensure that a special part of northern Wasco County's oak-pine woodlands was not "destroyed' by the 21 homesites and equestrian center development project approach that had been proposed twice for this part of Wasco County. Having learned the lesson that "developers are the enemy" at an early age, this individual purchased the property by leveraging his life savings. Despite declaring his intentions to create a conservation-oriented project, this individual found himself facing the opposition of a local conservation groups to his efforts (Dancer 2007). And even though Rowena Wilds does not employ the full complement of CSD elements, a former Wasco County planner observed that:

they're an excellent model of conservation without clustering, of recognizing the western aesthetic, you know they don't want to live close to their neighbors, but recognizing that they also want to have some covenants that make sure that they feel like they're doing the right thing while they live apart from one another, and… they've wound up doing a lot of the right things: maintaining a core of open area, limiting the disturbance to a site by any home, any one home, making sure that there are some fire protection practices in place… you wouldn't be comfortable buying into that home owners association, buying property and becoming a member of that home owners association, unless you shared some of those values… you would ask about the CC&Rs and why they say this or that and you would probably learn that it takes balsamroot 10-20 years to bloom and that what you look at when it does bloom is an old growth wildflower stand… So they built that culture and I think they've captured that [kind of ecological awareness]…[1]

Indeed, from this person's perspective Rowena Wilds represents a successful model of conservation, precisely because its governance emphasizes growing a community of folks committed to the environment.

[1] Interview B, Mosier, OR 5-31-06



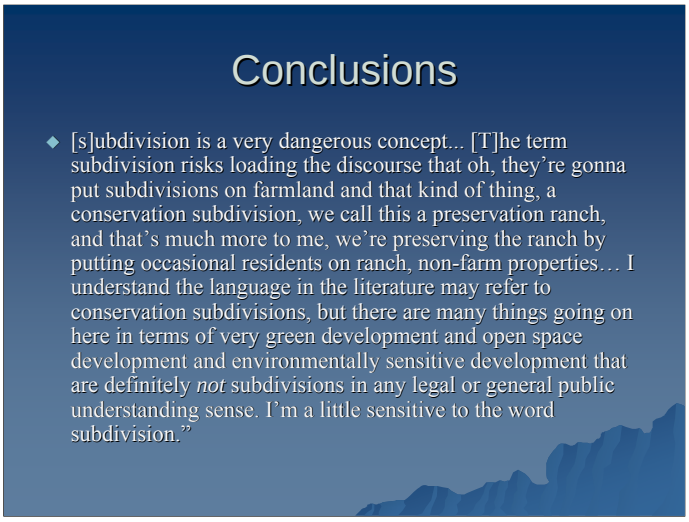
Deschutes River Ranch, by contrast, employs conservation subdivision design in its totality, yet constructs a space where agricultural production *and* landscape consumption are the emphasis. Like Rowena, Deschutes River Ranch is the product of local amenity migrants, one from within the state and one from the East, seeking to create something different from the usual exurban approach so common to the "new West." Instead of creating a set of ranchettes on already parcelized land, this project pursued the removal of existing homes and reconfigured both the new home sites and water delivery to the open space to maximize the ability of the land to produce fodder for grazing cattle and horses.[1] As one of the project's developers described it:

> •"We didn't create a little Hollywood set; you know, this [ranch] is the real deal. And people recognize that and appreciate that, they see the work that's going on and they don't have to get involved with it, but they have there, looking across green pastures, cows in the field, and you know they like that."[2]

The result is a landscape people can consume *and* a net increase in agriculture for the area, given the previous landowners' management goals. Residents also have access to the river for fishing and to trails both within the community and on significant BLM land adjacent to the site.[3]

[1] Interview N, Bend, OR 6-12-2006, [2] Interview O, Tumalo, OR 6-9-2006

[3] Interview A, Bend, OR 6-12-2006



Given the emphasis that developers put on place, recognizing the uneasy relationship between subdivision and conservation is an important point that bears additional consideration. Indeed, several interviewees expressed discomfort with the term "conservation subdivision design," both because they could not bring themselves to describe particular projects as truly representative of the approach and perhaps more significantly, as one respondent in Oregon who expressed concern with the terminology put it:

> •[s]ubdivision is a very dangerous concept... [T]he term subdivision risks loading the discourse that oh, they're gonna put subdivisions on farmland and that kind of thing, a conservation subdivision, we call this a preservation ranch, and that's much more to me, we're preserving the ranch by putting occasional residents on ranch, non-farm properties… I understand the language in the literature may refer to conservation subdivisions, but there are many things going on here in terms of very green development and open space development and environmentally sensitive development that are definitely *not* subdivisions in any legal or kind of general public understanding sense. I'm a little sensitive to the word subdivision."[1]

On the one hand, this discursive jolt is understandable, given the extent to which many of these projects represent dramatically different trajectories of land development when compared to wider land-use patterns in the two counties (particularly within Deschutes). Indeed, developing alternatives to exurban and suburban land-use patterns faces significant political issues, not just in the terms of broad resistance to particular projects *per se*, but in terms of the discursive terrain these spaces must negotiate. On the other hand, however, this quote suggests the very ways in which place-based decisionmaking must reframe discussions about development, by pointing out both the discursive barriers that policy frameworks represent and new ideas about what might be considered more proper relationships between nature and conservation.

[1] Interview R, Phone Interview, 2-27-2007

Conclusions

- These projects suggest that particular place qualities are being drawn upon to create new residential spaces that transform these particular qualities into amenities that are appealing to migrants and new home-buyers.
- "Traditional" or historic economic and cultural activities associated with particular places, such as ranching, may be central features of this transformative process.
- In many cases, project investors and developers are amenity migrants themselves, whose ideas about place and environmental governance infuse these new spaces
- In creating these new residential and amenity-based spaces, developers are reconfiguring the relationship of rural landscape attributes, the ownership of these attributes, and the decision-making mechanisms that will determine how these are managed.
- Quite literally, amenity migrants are putting new communities and governance mechanism into place, through the creation of new residential spaces that celebrate particular landscape qualities and associated human activities.