



BRIEFLY

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The problem is that a whole host of factors not considered during the process will determine whether a parcel deemed "buildable" will actually see new housing construction in the next 20 years.

Buildable Lands Process Flawed

In 1997 the Legislature added the Buildable Lands process to the Growth Management Act (GMA) as a review mechanism to help assure that comprehensive plans and development regulations of local jurisdictions do not prevent jurisdictions from meeting their growth and employment targets. Mindful of the high costs already imposed on local governments by the GMA, the Legislature confined the Buildable Lands requirements to just six counties : Clark, King, Kitsap, Pierce, Snohomish, and Thurston.

The legislation imposed a deadline of September 2002 for the first reports, with updates required every five years thereafter. Three years after the first reports were issued, and following a comprehensive review of one of them by the Central Puget Sound Growth Management Hearings Board (CPSGMHB), the strengths and weaknesses of the process have become clearer.

This brief examines the implications of the Buildable Lands process as it relates to the availability of land for housing. We begin by reviewing the Buildable Lands process and its limitations as a tool to understand the actual availability of land in dynamic urban markets. It then discusses additional information that would be needed to make it more useful. Finally, the brief discusses the "reasonable measures" that can be used to remedy inconsistencies between plans and observed outcomes.

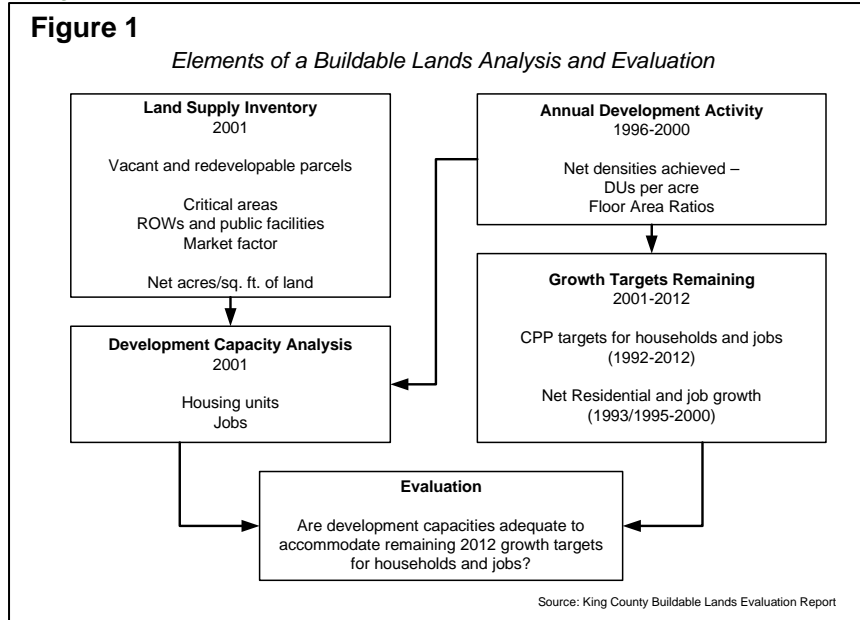
OBJECTIVES AND PROCESS

The ultimate goal of the Buildable Lands process is to determine if each county has enough development capacity to meet population and employment targets established by the Office of Financial Management. This involves measuring development trends and remaining capacity, and comparing them to job and housing targets. The Legislature tasked the Department of Community, Trade and Economic Development (CTED) with developing a model methodology (Department of Community, Trade and Economic Development 2000), which it did in cooperation with planning departments from the six counties. CTED sought to achieve some consistency in the processes undertaken by the various counties and cities. But in the end, jurisdictions used a range of definitions and assumptions throughout their data gathering and analysis.

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An important feature of the system is that city and county councils have no official role in guiding the Buildable Lands process or approving its results. The statute envisions that it will be an entirely technical exercise based on objective data and analysis. But as was highlighted in Snohomish County, where the county council took strong exception to some of the assumptions and methodologies employed by the staff in the executive branch, the process does require judgments that are not entirely objective.

Figure 1 shows the process as envisioned by King County. The activities in three of the boxes – land supply inventory, development capacity analysis, and evaluation – ignore a number of critical issues that, according to

the CPSGMHB, are beyond the scope of the Buildable Lands process (*S/K Realtors v. King County*). So while the results appear to be internally consistent and to meet the requirements of the statute, they may provide a false sense of land availability and therefore fail to provide accurate guidance for planning. Discussion below addresses factors in land availability that the Buildable Lands process does not measure and that can significantly affect the ability of jurisdictions to accommodate their share of growth.

WHAT THE BUILDABLE LANDS PROCESS MEASURES

The statute, CTED program guidelines and CPSGMHB all point to the following as key elements of the residential component of a Buildable Lands review:

Achieved densities. A key growth management goal is to increase densities overall and, in particular, to ensure that “urban level” densities are achieved in urban growth areas. Recent history should show a trend toward higher densities than were achieved prior to adoption of the comprehensive plan, although the first Buildable Lands reports largely reflect development activity on large lots that were vested prior to GMA.

Guidelines call for the measurement of net density, which divides units by the land area of the lots they occupy. Net densities exclude public roads, stormwater ponds, parks and other public facilities, as well as critical areas. Use of net densities is especially important since much of the undeveloped land in urban growth areas has wetlands, steep slopes and other critical areas. Gross densities, that include these critical areas, would mask a trend toward smaller lot sizes and clustering, which are useful responses to land constraints.

Land requirement. Each jurisdiction has a targeted number of housing units, by type, to be built in order to accommodate its assigned population growth. The number of each type of unit is divided by the anticipated net density to arrive at an estimate of the quantity of land needed for each housing type.

The accuracy of this estimate depends on two key projections. First is the projection of the mix of housing types that will be demanded in that jurisdiction. The GMA requires that cities and counties accommodate popula-



tion – bodies – but does not indicate what sort of housing they might want to live in. A jurisdiction that targets more for multi-family housing than the market demands may be accommodating growth on paper, but not on the ground. The second projection involves housing densities. The densities achieved recently include larger lots that were vested prior to GMA. Future densities should be greater – the question is just how much greater. Also, in some areas multi-family land is being developed at lower than zoned densities for a variety of reasons.

Land supply. The inventory of land that could accommodate residential development is the heart of the exercise. Jurisdictions use a variety of data sources and tools – permit records, assessors records, GIS systems, aerial photography – to calculate the amount of land that might be available for development during the planning period.

Land is classified as either vacant, having no usable structures, or redevelopable, having structures that are useable but of low value. As we discuss below, parcels that seem redevelopable according to some formula, may, in fact, not meet the economic requirements of redevelopment.

To arrive at the net acres of land that will be available, land is subtracted from the total inventory for a variety of reasons:

- ◇ Land needed for rights-of-way and capital facilities is set aside.
- ◇ Critical areas and buffers are subtracted when they preclude development.
- ◇ Parcels can be subtracted that fall below the minimum lot size, or which are too narrow to accommodate a structure within established setbacks.
- ◇ Areas which will not be served with infrastructure during the 20-year planning period can be eliminated, even if they are in the urban growth area.

Finally, a “market factor” is applied, which sets aside a certain percentage of the remaining land, under the assumption that the owners will, for unspecified reasons, not sell it during the planning period. During the first buildable land process, jurisdictions applied a wide variety of market factors.

The result of the measurement of gross acres, followed by the subtraction of land for various reasons, is a measurement of net acres of land expected to be available for development, broken out by zoning designation.

Adequacy of land supply. In the final step, the land supply and land requirement are compared to determine if enough land will be available to meet the population forecasts provided by OFM. This evaluation is more than just comparing two numbers. There obviously must be some surplus of land to make up for forecasting errors. But there also needs to be a surplus to maintain competition in the land market.

Just how big this surplus of supply or forecasted demand should be is not at all clear, and the Buildable Lands process provides no guidance. When the results of the process for the six counties came in, all of them claimed to have enough land for their 20-year planning horizon, but the surplus varies widely (see further discussion below).



WHAT THE BUILDABLE LANDS PROCESS DOES NOT MEASURE

The statute and CTED guidance describe a minimally-required Buildable Lands program, and few jurisdictions attempted to go beyond the basic requirements. Observers from the housing industry, however, have felt that in order for the analysis to be useful, other factors should be measured. In an appeal to the CPSGMHB, the Seattle-King County Association of Realtors argued that the King County Buildable Lands report was flawed because it did not take into account a number of factors that would affect the availability and developability of land that showed up in the inventory. The CPSGMHB determined that the King County Buildable Lands process met state requirements, so, for the time being, the factors noted by the Realtors remain outside the scope of the process (*S/K Realtors v. King County*).

Important factors affecting land markets that fall outside the Buildable Lands process include:

Infrastructure availability. Land can only accommodate housing if basic public infrastructure is in place to serve it. At a bare minimum, urban densities require sewer and water service. In some urbanized areas, however, such service is still not in place. In other areas, utilities are so old or undersized that they cannot support redevelopment at higher densities. In parts of the urban growth areas within the six counties the road network is inadequate to support urban densities, and schools have no excess capacity.

The problem with trying to account for the inadequacy of infrastructure stems from the different time horizons under which the Buildable Lands process and local capital improvement programs operate. Buildable Lands looks ahead 20 years, and only accounts for infrastructure deficiencies if they will not be met within that time. Capital facilities elements of GMA plans, and the local capital improvement programs that implement them tend to operate on a rolling six-year time-frame. So, it would not be until the 14th year of the plan, when the six-year CIP for that year shows the final infrastructure investments that will be made during the 20 year plan, that it would be known whether infrastructure will be available for a given area. But by that time the 20 year plan would have been rolled over again to a new 20-year target. So with CIPs never catching up to 20-year plans, there is no way to know if infrastructure needs will be met for any particular parcel.

For large undeveloped tracts on the periphery of growing areas, land developers can usually find a way to work with local and state governments to make the infrastructure investments needed to unlock development potential. The bigger problem may be in lightly-developed areas, where infrastructure is adequate to serve existing low density development, but not to serve higher density infill. The development potential in such areas may not be high enough to justify large public investments in sewer lines, stormwater systems, sidewalks and other features of urbanized development. At the same time, current residents may not want to make the investments themselves through local improvement districts. It is quite possible that such areas, especially if they are currently inexpensive markets, could remain underserved by infrastructure for a very long time.

Land development economics. A parcel of land may meet the definition of “developable,” but still remain so unattractive to home-

Figure 2: Housing Capacity in Seattle's Rainier Valley/East Beacon Hill

		Total Parcels	Potential Units	Unit Counts by Project Size		
				In Single-Unit Projects	In Projects of 2 to 5 Units	Over 5 Units
Single Family	Vacant	354	632	260	198	174
	Redev	637	1022	453	408	161
	Total	991	1654	713	606	335

		Total Parcels	Total Potential Units	Unit Counts by Project Size		
				In Projects of 2-3 Units	In Projects of 4 to 10 Units	In Projects Over 10 Units
Lowrise	Vacant	159	920	122	466	410
	Redev	426	1589	612	801	598
	Total	585	2509	734	1267	1008

Source: City of Seattle, The Housing Partnership

builders that it languishes in the marketplace for years. This is particularly the case with small, awkward parcels that have existing uses. For example, a double sized lot with a useable house in the middle might be considered “redevelopable.” But the cost of going through the short-plat process, demolishing the house and upgrading utilities may be higher than the value of the finished lots. Plus, if the house is habitable and could bring income as a rental, the seller will demand some value for it. Such a parcel, although considered developable, may never be feasible to work with. Similarly, on a hillside, the cost of stabilizing steep slopes may be higher than the price of the lots that would be created.

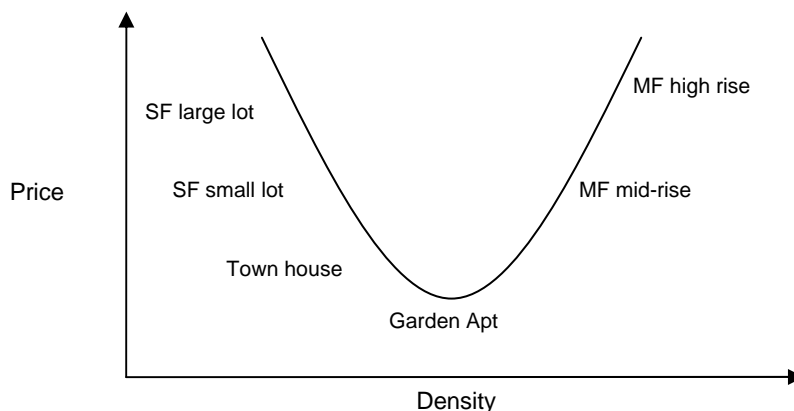
If land has been passed over for development, there is often a good reason. Steep slopes, wetlands and other physical problems make many areas that are considered buildable economically infeasible. The Buildable Lands process cannot measure this without doing a feasibility analysis on every parcel, which is not practical. But the problem is still very real. The Housing Partnership analyzed the parcels in Seattle’s Rainier Valley and East Beacon Hill neighborhoods that were considered developable by the City of Seattle as part of its Buildable Lands process. Figure 2 shows that a large part of the housing capacity measured is, in fact, in very small parcels. Projects with just one or two units are challenging to develop economically, especially in a lower priced neighborhood like the Rainier Valley. (Housing Partnership 2005)

The willingness of owners to sell. There is no assurance that the owners of the vacant or redevelopable land identified through the Buildable Lands process will actually be willing to sell within the 20-

year horizon. Economist Max Neutze points to two reasons property owners may hold on to land that a simple inventory indicates should be available for development. (Neutze 1987)

The first of these reasons is what Neutze terms “the non-financial direct utility that is obtained from occupation and ownership of land.” (Neutze 1987, p. 387) A land owner may personally put a higher value on maintaining her land in the current use than the market would pay to develop it for a new use.

Figure 3





The second reason that land is withheld from the market is inherent in the dynamic of the urban development. Buyers in the present time must compete with the owner's expectation as to the price she will be able to get for her land in the future. As Neutze observes:

The analysis of urban land when there are alternative sequences of development shows that it is sometimes worth holding land vacant, in an existing use, even when it could bring higher net returns in another use. This occurs because committing it to the second use may be less valuable than holding it vacant in order to be able to commit it later to an even more profitable use. (Neutze 1987, p. 386)

Uncertainty as to which future use will prove to be most profitable further increases the incentive to hold off development.

The value of the vacant site is then the value of the option to choose the future level of development in the light of those future conditions. . . . The greater the level of uncertainty about future market conditions, the greater the value of the option to decide the level and type of development in the light of those conditions as they emerge rather than determine them immediately in order to build forthwith. (Neutze 1987, p. 386)

Economics of high density. All of the Buildable Lands counties rely for some portion of their housing capacity on urban centers with high density mixed use zoning. In King County, 42 percent of identified housing capacity lies in mixed use zones, with mixed use accounting for 84 percent of Bellevue's capacity (13,200 units) and 54 percent of Seattle's capacity (65,000 units). Two thirds of King County's "surplus" capacity would evaporate if mixed use development failed to happen. Other counties rely on mixed use to a lesser, but still important degree.

The economics of higher density housing, however, turn out to be counterintuitive. As shown in Figure 3, prices drop as densities increase from large-lot single family housing, through small-lot housing and townhouses. Traditional garden-style apartments ("woody walk-ups") at 20 to 30 units per acre, are the lowest cost housing. Then, prices increase again, as densities climb to mid-rise and high-rise multi-family buildings.

The main driver behind the higher price of mid-rise housing is the cost of underground parking, which adds as much as \$200 per month to an apartment rental, or \$35,000 to a condominium purchase price. To justify the higher cost being paid by residents for parking, developers must add finishes and amenities that further increase the cost – consumers will not pay extra just for underground parking, but will pay for that parking as part of an overall luxury housing environment.

High rise housing gets burdened with an even higher cost of parking, since garages must go down several layers and each layer below the surface costs more than the previous layer. On top of that, high rise housing must use concrete construction, which is about twice the cost of wood frame. And as with parking, the developer must add features and amenities to justify the higher construction cost. So although high rise housing uses much less land per unit, parking and construction costs force it into the most expensive price points.



While the Buildable Lands process identified a great deal of capacity in mixed use zones, which may accommodate either high rise or mid-rise, that capacity is useful only for relatively expensive housing, for which there is a limited market. In most areas with mixed-use zoning, townhouses and even detached houses are available at prices comparable to what must be charged for urban center style housing. It is quite possible that some of these markets will not support high density urban center housing within the 20-year planning horizon.

Consumer preferences. The GMA requires only that jurisdictions demonstrate that they can fit enough housing units onto their land base to accommodate a population figure. It says nothing about what types of housing units those might be, and whether they will meet the needs and desires of the people who want to live in that community. A jurisdiction could have a huge overall unit capacity, but if little of that land is dedicated to the types of housing popular in that market, it will see little development. The main divide in the market is between detached and attached housing. Most of the existing housing stock is concentrated in single family neighborhoods with relatively large lots, and multi-family complexes with dozens or more units. Comprehensive plans and zoning have tended to continue this pattern, protecting existing single family zoning, while adding multi-family capacity to urban centers.

This pattern of development presents consumers with stark choices, and, not surprisingly, most prefer single family detached housing or, as a second choice, townhouses. Only a few of the designated urban centers have materialized and most show no signs of providing significant housing in the next decade, so consumers are left with much the same choices as before. The result is that single family and townhouse land is being used up much faster than multi-family and especially urban center land, as buyers continue to opt for detached or semi-detached housing.

The buildable land process does not attempt to determine trends in demand for housing types, but, instead, allows jurisdictions to plan for their preferred mix of housing types, whether or not that mix conforms to actual consumer demand. There is no question that demand is shifting to higher density housing, due to demographics and prices, but it is not clear whether the pace of this shift is enough to avoid a major shortage of detached and semi-detached housing in high-growth areas.

During the 1990s, the job boom in King County pushed demand for detached housing into Pierce County and central Snohomish County. That demand is now shifting further up and down the Interstate 5 corridor into northern Snohomish County and Thurston County. As the demand for detached housing stubbornly persists, and local zoning offers few attractive alternatives for those priced out of the market for traditional neighborhoods, moderate income households must “drive to qualify.” This phenomenon of people enduring long commutes from affordable detached housing is a huge factor in housing markets that the Buildable Lands process does not account for.

REASONABLE MEASURES

Once the evaluation of land capacity is complete, any jurisdiction that finds that development patterns have been inconsistent with its plan (i.e. lower density) and its development capacity is not sufficient to meet its housing targets must “implement measures that are reasonably

likely to increase consistency during the subsequent five year period.” These actions must be taken before the jurisdiction can contemplate

expanding urban growth areas.

The statute does not specify what these “reasonable measures” might be, but instead requires CTED to develop a list of possible actions. The list of actions that CTED published contains a wide range of ideas, from the obvious (allow smaller lot sizes and increase zoned densities) to the less direct (implement design standards). With this guidance, it is up to the individual jurisdiction to choose what measures it will implement, and the statute offers no way to determine if the measures will actually solve identified problems.

As it turns out, very few jurisdictions found that they had a consistency problem that needed to be remedied through reasonable measures. And for those jurisdictions, the only evaluation of the effectiveness their remedial measures will be the next iteration of the Buildable Lands process, at which

point the effect of those measures will likely be masked by larger economic forces.

THREE DEFINITIONAL PROBLEMS

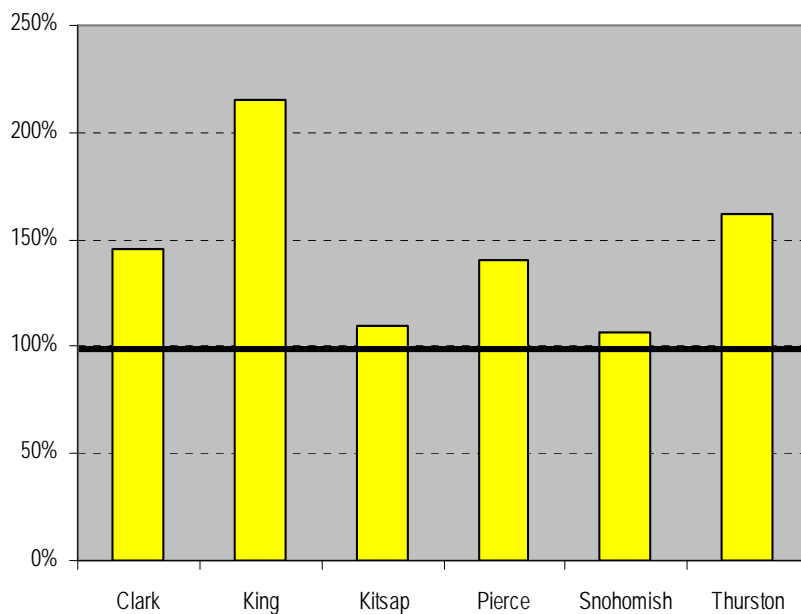
The Buildable Lands process was originally thought to be an objective, technical process that would generate data needed to inform policies and planning decisions. That objectivity has proved to be elusive, as illustrated by three key definitional problems:

What is “buildable?” Local governments and the building industry have taken quite different views of this definition. Buildable Lands reports tend to assume that if a parcel is vacant or has a very low value structure and is not needed for anything else (like a road), then it is “developable.” For land developers and builders, on the other hand, this definition is just the starting point. They need to know if a particular parcel is served by infrastructure and is economically feasible to develop such that it will yield a profitable result.

The CPSGMHB sided with the definition of “buildable” used by local governments, indicating that Buildable Lands processes do not need to take infrastructure availability into account or to consider market forces beyond the use of a single “market factor.” The housing industry has argued that not factoring infrastructure or market forces into the definition of “buildable” greatly overstates the land supply.

What is “sufficient?” As employed by Buildable Lands reports, “sufficient capacity” seems to mean simply having some surplus of measured capacity over projected demand. How big that surplus is does not seem to matter much in the statute. Figure 5 shows the surpluses reported by county in their Buildable Lands inventories. Snohomish

Figure 4: Future Housing Capacity as Percent of Projected Demand



Source: WA St. Dept of Community, Trade and Economic Development



and Kitsap counties show very small surpluses, and yet their land supply was considered sufficient.

The housing industry would argue, however, that to be “sufficient,” the supply of land must be large enough to ensure a competitive market. As land becomes increasingly scarce, owners will demand higher and higher prices, gradually eliminating the lower end of the housing market from the land bidding war. As will be discussed in the next paper in this series, land scarcity is driving land prices up, making it impossible to meet even moderate cost housing needs, let alone low cost housing needs.

What is “reasonably likely?” Some of the “reasonable measures” suggested by CTED would clearly result in higher housing densities. With others, it is not at all obvious that they would result in higher densities. Snohomish County commissioned a study of the reasonable measures process that included an evaluation of the measures suggested by CTED. In that study, the consultants found that only about one third of the suggested measures would have a direct impact on density. In evaluating the scale of impact that could be expected, they found that of 41 suggested measures, only 11 would have a large or moderate-to-large impact, while 26 would have a small or moderate-to-small impact. The consultant report notes that many of the measures suggested by CTED are really aimed at policy objectives other than density. (ECONorthwest 2003) So it is possible for a jurisdiction to meet its requirement to implement “reasonable measures” by taking actions that will, in fact, have little impact on densities.

CONCLUSION: NECESSARY BUT NOT SUFFICIENT

Any management structure requires a data feedback loop to allow evaluation and adjustment of policies and plans. The Buildable Lands process was intended to provide that data to city and county governments as they update the comprehensive plans they use to manage growth. The process used for the first iteration of Buildable Lands, as defined by CTED and affirmed by the CPSGMHB, has proven to be useful, but far from sufficient.

Few observers of the Buildable Lands process have argued that the data collection exercise itself has had serious flaws. The inventory of parcels seems accurate enough. The problem is that a whole host of factors not employed during the process will determine whether a parcel sees new housing construction in the next 20 years. Those factors cannot be



part of the Buildable Lands process as currently defined, but they need to enter the analysis and be part of decisions about future plan updates.

REFERENCES

- Department of Community, Trade and Economic Development, 2000. Buildable Lands Program Guide.
- Department of Community, Trade and Economic Development, 2003. Buildable Lands Program: 2002 Evaluation Report.
- ECONorthwest, 2003. Phase II Report: Recommended Method for Evaluating Local Reasonable Measures Programs.
- King County Buildable Lands Evaluation Report, 2002. King County, in collaboration with City of Bellevue, City of Seattle, Suburban Cities Association of King County.
- Neutze, Max. (1987). "The Supply of Land for a Particular Use." *Urban Studies*. Vol. 24. 379-388.
- The Housing Partnership, 2005. The Small Parcel Problem. Housing Stock newsletter, April, 2005
- S/K Realtors v. King County. Central Puget Sound Growth Management Hearings Board. Case 04-03-0028. Final Decision and Order, May 31, 2005