



## Chelan County PUD Strategic Plan 2015 – 2019



Shaping our **utility**  
to do the **best**,  
for the **most**,  
for the **longest**

*April 2015*



*Chelan County PUD commissioners, from top left to bottom right: Carnan Bergren, Garry Arseneault, Randy Smith, Ann Congdon, Dennis Bolz.*

# Executive Summary

Eighteen months ago, Chelan County PUD began a conversation with our customer-owners about how our actions as a public power utility could enhance the quality of their lives. This was a new chapter in our journey toward achieving the “ideal” of public power’s commitment to service, stewardship, and customer satisfaction. Chelan PUD exists because our customer-owners had a vision more than 75 years ago to create this utility and entrust it to a locally-elected Board of Commissioners.

The vision for this effort was defined by our Board of Commissioners, who recognized this strategic planning effort as a potentially historic opportunity for the entire county to make informed choices about the future direction of this utility. We began by asking a simple question: How could we create the best value, for the most people, for the longest period of time? Because we work for our customer-owners, we believed this question should be answered by all of you.

At the beginning of the process, we provided information about our financial position and the threats and opportunities we see on the horizon. The fundamental strategic issue described was that Chelan PUD must prepare for two possible future scenarios: one of positive financial results, when revenues exceed costs; and one of relative financial stress, when costs exceed revenues. There are three key “take-aways” from our public conversation:

- 1. Our first priority should be reinvesting in our core, value-creating assets: the hydropower projects, distribution systems, facilities and people;**
- 2. We should substantially reduce debt; and**
- 3. We should initiate a public power benefit program.**

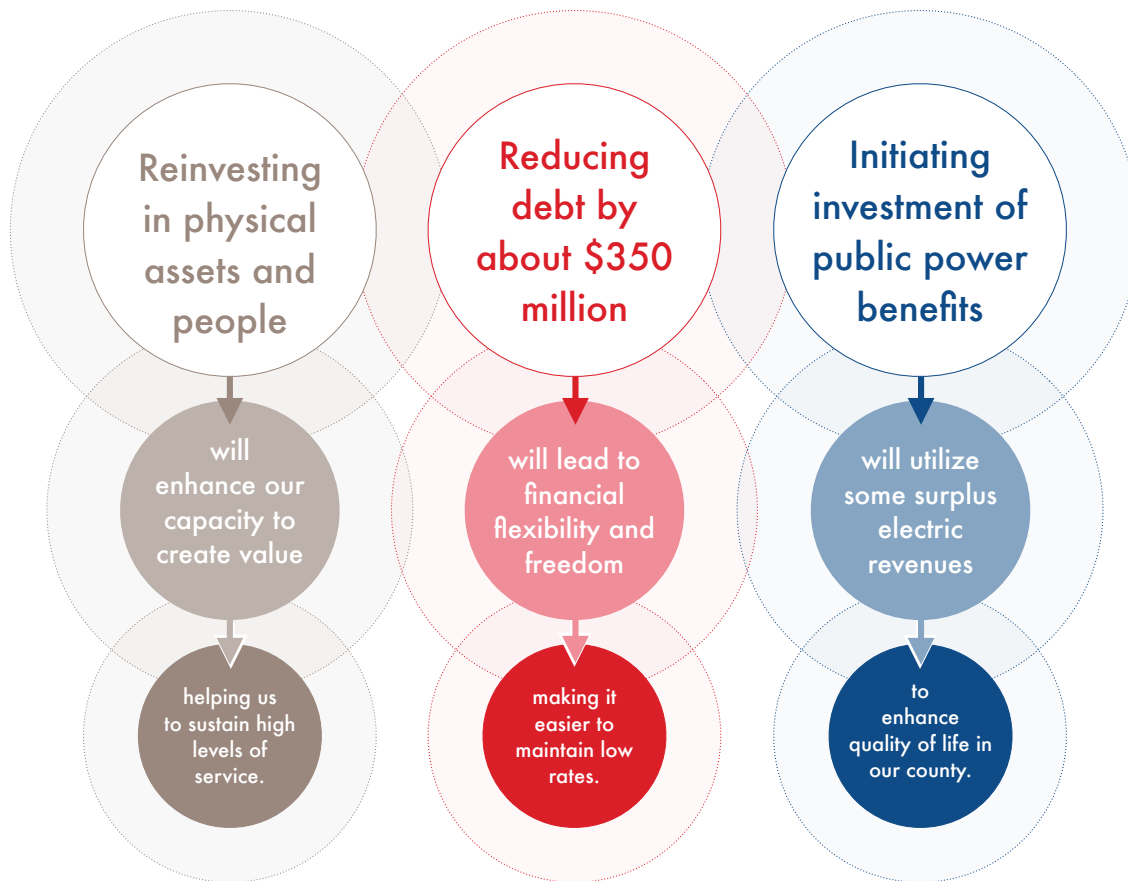
Overwhelmingly, our customer-owners understand that our assets – both the physical facilities and the knowledge of our Chelan PUD employees – are the primary source of value that enables us to have among the lowest electric rates in the country. The potential for maintaining and even enhancing value from these assets through reinvestment was widely supported throughout the strategic planning process. This concept is a cornerstone of our strategic plan because we can only reduce debt and provide a public power benefit if our assets produce value. Hence, reinvestment is our highest priority.

During the last five years, Chelan PUD has improved our finances substantially in order to better weather potential negative financial circumstances. To further address a potential low-revenue and/or high-cost scenario, our Board of Commissioners, supported by substantial public comment, determined that another high priority should be reducing debt. Our financial plans include reducing our debt balance by approximately 48% over the next 5 years. This creates prudent financial flexibility that would be advantageous for managing rates if we have lower than expected financial results. As a result of these efforts, we believe there is a very high probability we will not need to increase the amount of revenue from electric rates in the next 5 years, although there may be a need for rate design changes.

We recognized it was also important to plan for the positive outlook, when we may have revenue available to provide additional value to this county. Planning for this scenario set the stage for a potential “public power benefit” — funding that could be made available in good revenue years to further enhance the quality of life in this county.

The discussion with our customer-owners has focused primarily on the question of how a possible “public power benefit” could be invested after we have strategically invested in our core assets, paid down debt and

# 2015-2019 Strategic Priorities



saved for our “rainy-day” fund. Chelan PUD formed a group of about 40 community leaders known as the “Strategy Partners” to provide input on the concept of a public power benefit. We also created “Topic Teams” with members of the public to explore six specific areas of interest: 1) Parks and Recreation; 2) Water and Wastewater; 3) Fiber and Telecom; 4) Electrification; 5) Economic Development; and 6) Reinvestment in the Business. Recommendations from these Topic Teams were developed and sent to all county residents through an in-depth Owners Guide and survey to assess community priorities.

We were blown away by the response. More than 10 percent of our county residents took the time to thoughtfully define their priorities, with the understanding that a public power benefit decision needs to take into account available revenue and sustainable financial policies. After receiving the survey results, we brought the conclusions back to the Strategy Partners and our Board of Commissioners to determine next steps. The great news is that in the near term, we intend to proceed with public power benefit investments. Dedicated funding will be modest at first as we gain experience and troubleshoot the entire concept of distributing a public power benefit. Each year, we will plan an appropriate budget for the public power benefit and allocate funds among the highest priorities in accordance with public input and the leadership of our Board of Commissioners. In other words, we will “crawl before we walk and walk before we run.” Starting off slow will help ensure that we have adequate revenues to support the public power benefit while not compromising our highest priorities of investing in our core assets and paying down debt.



Keeping electric rates low is the number-one way we provide public power benefits to all Chelan PUD customer-owners. This keeps the benefit in your pocket each month through your electric bill. In addition, our Board of Commissioners has decided there should be a modest public power benefit of approximately \$8 million for 2015 and 2016 combined. Some of this funding will be applied in 2015, with the rest in 2016 as part of the 2016 budgeting process. Based on public input, the Board of Commissioners has selected the following priorities. More detail on these priorities can be found in the *Public Power Benefit Decision* section of this strategic plan.

- Conduct a pilot study during 2015 and 2016 for waiving or reducing day-use fees for Chelan County residents who use Chelan PUD parks operated by Washington State Parks.
- Conduct a feasibility study to determine the potential for providing a continuous water source for the Horan Wildlife Area in order to preserve the wetland trail and educational experience.
- Conduct a feasibility analysis for a splash-pad in a Chelan PUD-owned park.
- Sustain existing water and wastewater services by providing capital funding to set these systems up for success.
- Conduct legal analysis to explore Chelan PUD authority to expand water and wastewater services to promote prudent growth.
- Evaluate water/wastewater system opportunities for operational efficiencies between entities.
- Investigate Chelan PUD's legal authority to fund improvements for surface water quality.
- Restart the fiber system expansion to pass 85-90 percent of current electric customers.
- Install vehicle chargers at PUD facilities.
- Develop an economic analysis tool to help evaluate net impacts of new electric loads due to new or expanding business.
- Develop utility-focused education and mentoring programs.
- Take an active role in economic development from a basic infrastructure perspective, committing staff time and study resources.

We are enthusiastic about the potential for providing additional value to our customer-owners in this manner; however, there are no guarantees about the future — and that particularly applies to financial forecasts. We want all customer-owners to understand that while today's financial circumstances suggest we have good reasons to be hopeful, we cannot make promises about the annual amount of public power benefit — or even if it can continue. Each year, our Board of Commissioners will consider the amount of the public power benefit based on actual financial performance combined with specific short-term and long-term financial metrics. For added perspective, strategic guidance for the next two years translates to about \$150 million of net debt reduction and \$8 million of public power benefit: a reflection of our commitment to paying down debt.

Throughout this strategic planning process, there was strong community engagement and support for ensuring that Chelan PUD reinvests in the fundamental assets that sustain revenue. Essentially, the availability of a public power benefit hinges on creating long-term value. Our entire strategic plan, our core objectives and all our business unit actions need to reflect this emphasis on creating long-term value for our customer-owners.

As a result of our strategic planning process, we have identified seven strategic objectives that drive our business operations and support the ultimate goal of “doing the best, for the most, for the longest.” The



***Chelan PUD’s senior management team. From left to right: John Stoll, Customer Utilities; Kelly Boyd, Chief Financial/Risk Officer; Gregg Carrington, Energy Resources; Steve Wright, General Manager; Kirk Hudson, Generation and Transmission; Lorna Klemanski, HR Labor and Safety; Erik Wahlquist, General Counsel/Chief Compliance Officer; Mike Coleman, Fiber and Telecom; and Jeff Smith, District Services.***

seven objectives are 1) Commit to the highest level of customer-owner satisfaction; 2) Invest to create long term value for customer-owners; 3) Protect and enhance natural resources impacted by operations; 4) Ensure financial stability; 5) Make continuous improvements in efficient, effective, compliant and risk-assessed operations; 6) Enhance the capability of Chelan PUD staff; and 7) Make our values the focus of relationships with customers, stakeholders and each other.

We encourage our customer-owners to read our entire strategic plan, and to continue being an advisor to your Chelan County PUD.

## **Mission, Vision, and Chelan PUD Values**

Strategic planning begins with a Mission and a Vision. More than 75 years ago, our utility was created by citizens of this county who voted in 1936 to create a local utility. Over time, Chelan PUD acquired valuable generating assets that enabled this county to have local control over a big part of its economic destiny — reliable, low-cost electricity. Early county leaders believed that investing in the future through hydropower would provide benefits for generations to come.

Today, our Mission and Vision reflect our history as a citizen-driven organization. They define why we exist.

***Vision: To be valued as an innovative, trusted and highly respected public utility for generations to come.***

***Mission: To provide sustainable, reliable utility services that enhance the quality of life in Chelan County.***

Our Values are another component of who we are. In carrying out our Mission and Vision, it is our goal to always act in accordance with our Values. In many ways, these Values guide how our Board of Commissioners, our general manager and our employees should interact with our customer-owners, each other, our regulators, and other stakeholders. We prominently display these within our organization as a constant reminder of our obligation to be good stewards of this utility.

During the strategic planning process for 2015, a particular emphasis has been on stewardship — focusing on how management of this utility’s assets can provide sustainable value for our customer-owners for the long-term.

## The Big Picture

Chelan PUD is primarily an electric utility. Roughly 95 percent of our revenues come from the electric business. We are a relatively small utility in terms of retail customers, but our assets are nationally-significant.

Chelan PUD serves approximately 49,500 electric customers in Chelan County, but our hydropower dams generate enough power for about 1 million people. Because less than 20 percent of Chelan County power is used in Chelan County by retail customers, the rest is sold through long-term contracts to other Northwest utilities and Alcoa or on the wholesale power market. Wholesale market sales essentially provide enough extra revenue to support low retail electric rates here at home.

Surplus power generation represents just under 80 percent of our annual revenue. Other business units (retail electric, water, wastewater and fiber) provide some revenues, but generally do not cover their associated costs. Essentially, Chelan PUD has made choices in the past to use revenue from surplus hydropower sales to support utility services that otherwise may not be available in a rural area. These investments provide both statewide and nationwide benefits. These services improve our quality of life. They include construction and operation of the fiber optics system; water services to outlying, high elevation regions that are more expensive to serve; and wastewater services to the upper Wenatchee River valley, which is costly due to water quality and other challenges.

The source of Chelan PUD’s financial value is our hydropower assets. From these assets flow our ability to provide services and amenities that make this county a great place to live — like low electric rates, premier parks, fiber optics, and water and wastewater services. We therefore consider it important to preserve, promote and enhance the value of these assets.



CHELAN COUNTY

## Our Values

### **Safety**

*protect public and employee  
health and safety*

### **Stewardship**

*acting on behalf of  
customer-owners, protecting  
public resources entrusted to us*

### **Trustworthiness**

*competence, integrity, respect*

### **Operational Excellence**

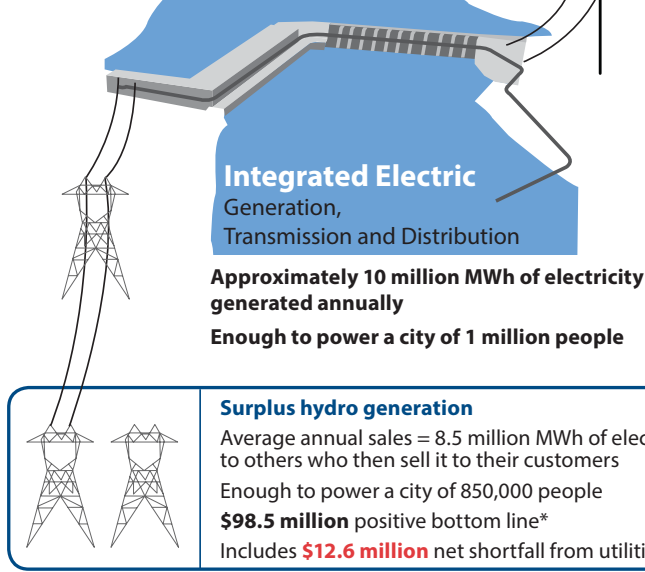
*high-quality innovative  
work execution*

### **A Powerful Team**

Chelan County PUD Employees

## Chelan PUD...

### Surplus hydro generation keeps local rates low



\* Based on 2015 Adopted Budget

The incredible value of the hydropower system puts us in an enviable position. Under the expected financial forecast, Chelan PUD has no plans to increase the overall revenue from electric rates during the next five years. There may be a need to address rate design issues to assure equity across our various customers.

The situation is not the same for other utility services. Rate increases for the water and wastewater utilities likely will be necessary, and we will continue to monitor the need for fiber rate increases. However, Chelan PUD's Board of Commissioners has decided to utilize public power benefits generated by the electric business to help mitigate the size of any rate increases.

## Resource Position

Into the foreseeable future, Chelan PUD is forecasted to have more than enough generation to meet our needs for retail load. In accordance with state law, Chelan PUD develops a 10-year Integrated Resource Plan (IRP) every four years, with updates every two years. These IRPs require us to explain the mix of generation and demand-side resources we plan to use to meet our customer-owners' electricity needs in both the short-term and the long-term.

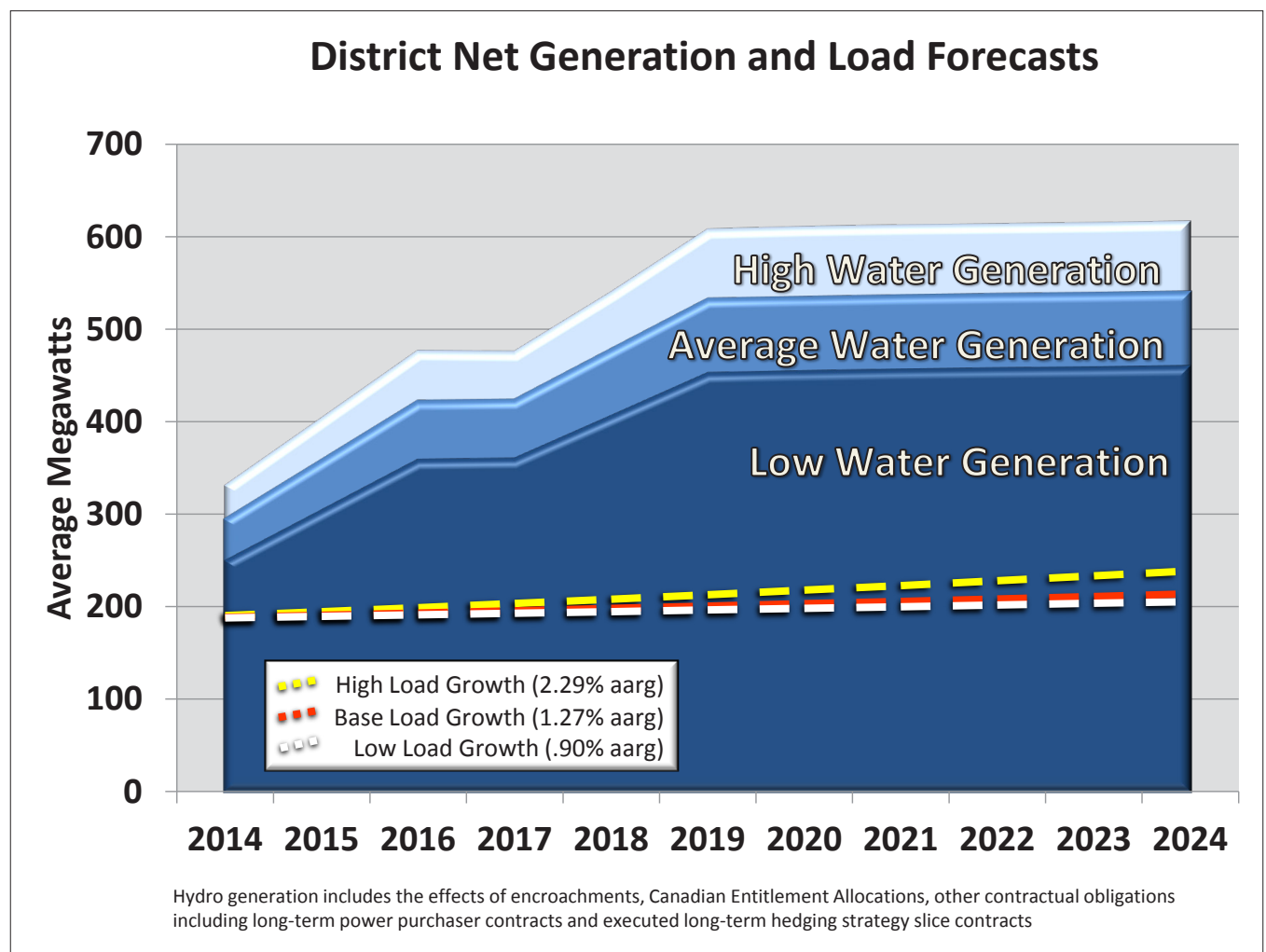
In addition to our three hydroelectric projects, we are a participant in the Nine Canyon Wind Project in Benton County, Washington. Chelan PUD's share of Nine Canyon is less than one percent of our overall



resource portfolio. Chelan PUD also purchases wind and solar power generated by our customer-owners through our Sustainable Natural Alternative Power (SNAP) program. In 2014, these sources totaled 251,093 kilowatt hours.

The following graph includes all Chelan PUD’s hydropower generation (except hydropower generation that has been committed through “slice of the system” contracts) and wind and conservation resources. Additionally, the graph illustrates three potential scenarios for retail load growth (low, medium and high) before planned conservation savings. In all cases, existing resources are significantly higher than projected load growth. In addition, Chelan PUD strives to help our customer-owners improve their energy efficiency, further limiting future electric demand in this county. Since 2010, Chelan PUD has acquired almost 7.6 average megawatts of conservation.

Low retail load and modest load-growth in Chelan County essentially allows Chelan PUD to sell enough surplus hydropower generation on the wholesale power market to support low electric rates here at home. Wholesale sales are also the source of revenue that has allowed Chelan PUD to contribute capital funds to its business lines that do not cover their associated costs. Each year, these same wholesale power sales also help determine whether Chelan PUD has a good revenue year or a poor one. Therefore, wholesale sales will directly influence whether Chelan PUD will have an opportunity to provide a public power benefit.



In general, load growth for all types of electric customers has been 1 to 3 average megawatts per year. Due to the uncertainty about future large industrial loads, these forecasts represent a broad range of growth rates. However, there is an increasing trend toward more requests for new large loads.

Large load increases have substantial implications for all customer-owners because of our utility's reliance on surplus wholesale power sales. More power used within the county means less power available to sell on the wholesale market, and less revenue available to keep retail rates low — but it could also spur local economic development. As a utility, we need to consider these load growth issues in the context of our strategic planning process, and particularly how Chelan PUD can best leverage surplus power to attract industries and jobs that provide the most value to this community.

Surplus hydropower sales are at the heart of our utility model. However, these markets are very competitive. They are also regional — and influenced by national policy. Currently, they are going through a major period of transformative change. This makes them a source of opportunity and risk for Chelan PUD.

To ensure the utility has a stable and sufficient revenue stream to sustain long-term operations, Chelan PUD has developed a comprehensive “hedging” program to strategically manage these wholesale power sales. The hedging program sets forth how Chelan PUD sells its hydropower generation to mitigate risks associated with market price volatility, stream flow variability, and forced outages.

In addition to these market and operational risks, increasingly we have seen public policy choices influence electric market design and operations. The most well-known example in Washington State is the renewable portfolio standard (RPS), which requires utilities with more than 25,000 retail customers to use eligible renewable resources or acquire equivalent renewable energy credits to serve three percent of load by 2012; nine percent by 2016; and 15 percent by 2020. Most hydropower is not an eligible renewable resource under this law, though certain efficiency gains from incremental hydropower do qualify.

Our existing mix of generating resources complies with the RPS. We will meet these renewable requirements with incremental hydropower from equipment and operation upgrades, such as generator and turbine rehabilitations, or increased power generation with the same amount of water. Based upon the current base load forecast, the amount of renewable resources required to meet the RPS standard is approximately five-six average megawatts (aMW) in 2014-2015; approximately 17-18 aMW in 2016-2019; and approximately 30-32 aMW in 2020-2024. For the foreseeable future, Chelan PUD has sufficient qualifying incremental hydropower generation to meet the RPS under any plausible scenario. For example, in 2013 we had 82 aMW available to meet our requirements.

*Our existing hydropower assets compare favorably to all other sources of generation in terms of cost and capability, while also being a carbon-free resource.*

In addition, the RPS has required that “each qualifying utility pursue all available conservation that is cost-effective, reliable and feasible.” Chelan PUD uses a conservation potential assessment for setting its conservation targets. In January 2014, our assessment estimated a 10-year potential conservation savings of 13 aMW and a 20-year potential of more than 26 aMW. Chelan PUD views conservation targets as a minimum goal.

*Our goal is to maintain our low-cost electric supply while also seeking effective, “least-cost” strategies for achieving environmental objectives.*

Chelan PUD is fortunate to have a generation supply that is essentially all carbon-free hydropower (though we do have one small back-up diesel generator that serves the remote town of Stehekin). In 2007 and 2008, Chelan PUD hired a company to audit our utility-wide greenhouse gas (GHG) emissions. As expected, we have some of the lowest GHG emissions per megawatt of energy production. However, we do have some sources of GHGs throughout our utility

operations, including our vehicles and insulating gases used for the transmission system. We also have some emissions associated with occasional power market purchases we make during certain hours of the year depending on load and hydro-system conditions. Overall, we determined that Chelan PUD is in a good position in terms of GHG management.

How we fit into the larger debate on GHG reduction will be affected by public policy decisions about the pros and cons of different renewable resources and the costs and benefits of possible compliance requirements. Our philosophy is that public policy efforts to reduce GHGs should rely on a planning methodology similar to what the electric utility industry has used for more than three decades to meet demand at the lowest cost. This means that the goal should be to meet GHG emission reductions targets at the “least-cost.”

We own more resources than our load projections. Our existing hydropower assets compare favorably to all other sources of generation in terms of cost and capability, while also being a carbon-free resource. From a strategic perspective, our resource position means that we do not need to acquire any new generation to meet load growth. However, we will continue to support programs which enable customers who want to willingly make voluntary funding commitments to support the installation of solar and wind resources.

## Financial Position

In 2010, Chelan PUD updated its financial policies to achieve an appropriate framework for making spending and investment decisions. From 2010 to 2014, Chelan PUD took a number of actions to strengthen its financial position in four key metrics. These financial metrics allow us to measure ourselves against the expectations of credit rating agencies who determine if this utility will maintain its AA rating. The following chart demonstrates that Chelan PUD significantly improved its rankings in all four categories — and exceeds industry metrics by a wide margin in some areas. However, debt levels continue to be high.

Metric	Chelan Relative Ranking in 2010	Chelan Relative Ranking in 2014	Expectation for AA rated entity
Debt leverage	Weaker at 75%	Improved at 53%	26-50%
Debt service coverage	Weaker at 1.27x	Stronger at 2.52x	>2.0-2.49x
Financial liquidity	Very Strong at 499 days	Very Strong at 419 days	>150-249 days
Rate of return	Weaker at (1.2%)	Stronger at 8.3%	4-6% (peer avg.)

During the current strategic planning process, it was important to revisit these metrics and put in place financial targets for the next five years. The future still holds many uncertainties and potential risk factors that could impact our financial well-being. The Chelan PUD Board of Commissioners passed a resolution in May 2014 to set the following financial policies to ensure a sustainable financial path. These targets are in line with expectations for an AA-rated entity. These targets establish the financial framework for the strategic plan.

<b>Metric</b>	<b>Expectation for AA rated entity</b>	<b>District Recommended Targets 2015-2019</b>
Debt leverage	26-50%	<60% for 2014, <35% by the end of 2019
Debt service coverage	>2.0-2.49x	>2.0x or >1.25x under unusual conditions
Financial liquidity	>150-249 days	>\$175M in total liquidity with at least \$150 million unrestricted
Rate of return	4-6% (peer avg.)	>4% or >2% under unusual conditions

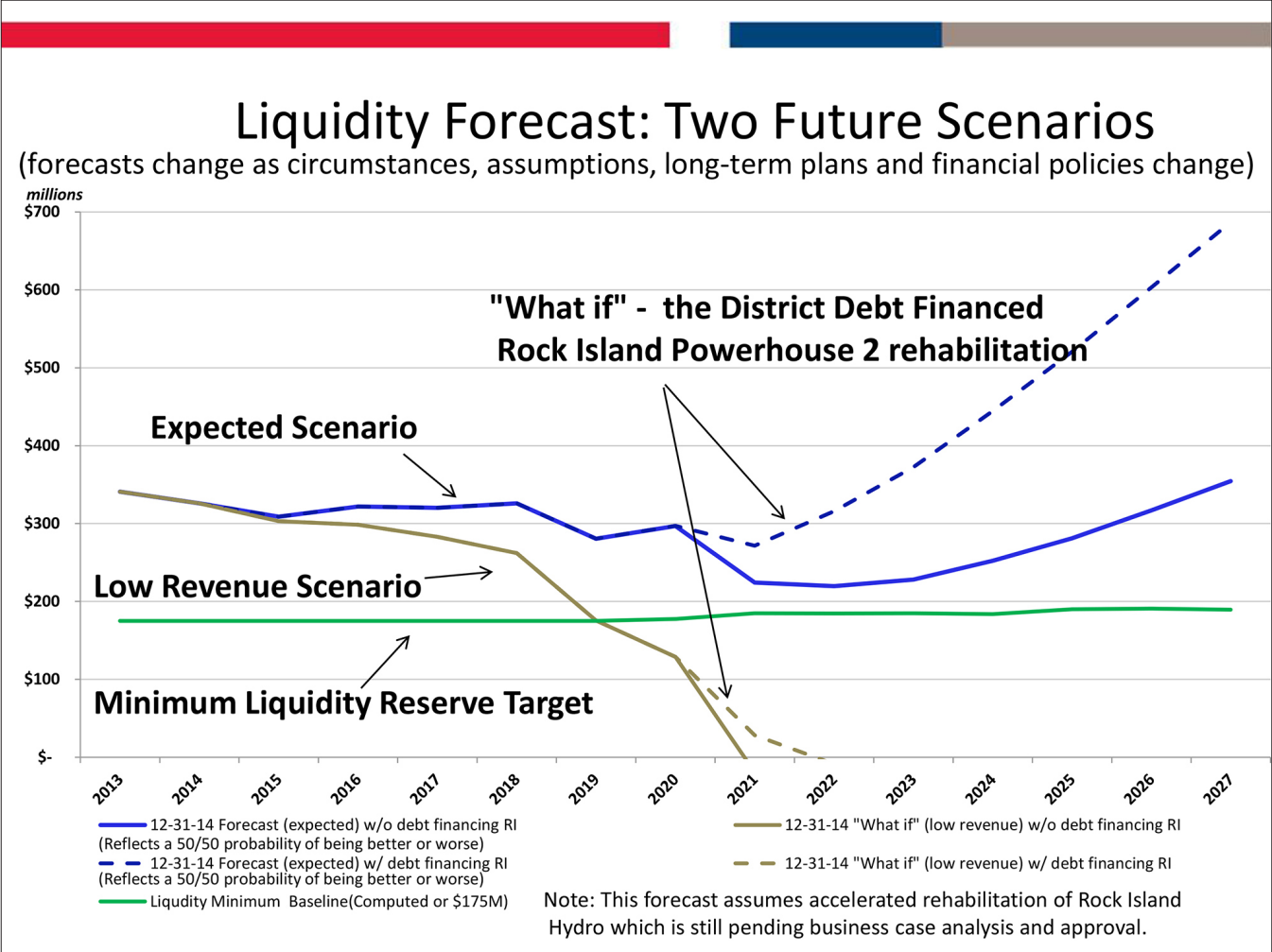
In order to meet these targets, Chelan PUD’s primary challenge is tackling our existing debt. A debt ratio indicates the proportion of a company’s assets that are financed by debt. A higher percentage means greater financial risk. Reducing debt strengthens our financial position and gives us additional operational flexibility if unexpected, negative financial events arise in the future. For example, if a person pays off their home mortgage, they no longer need to make house payments, and the funds that used to be dedicated to paying the monthly mortgage payment can be put into savings and used for unplanned expenses. In other words, less debt means more flexibility to achieve utility goals while maintaining our credit rating.

It’s worth noting that there are times when debt financing may be appropriate. For example, periods of low interest rates may represent a good time to finance if debt leverage levels are fiscally sound and cash reserves can be applied to other purposes that may have a better return. This strategic plan needs to be flexible enough that Chelan PUD’s Board of Commissioners could approve a debt financing approach if an opportunity arises in the future that would provide more long-term value than debt reduction. At this time, however, our significant debt level makes reduction the fiscally-responsible path forward.

Already, Chelan PUD has significantly improved our debt to equity ratio and intends to continue this improvement, with a target of less than 35 percent by 2019. To achieve this reduction, Chelan PUD plans to pay down debt at its earliest call date, which means the earliest date a bond can be redeemed by the issuer before the actual maturity date. This strategy represents debt reduction of about \$350 million, or 48%, which is significant. This approach will be reviewed annually to ensure Chelan PUD is making the very best use of its available cash and utilizing debt appropriately. This approach actually enhances cashflow in the near-term, while also being in the long-term interest of our customer-owners.

Chelan PUD’s five-year forecasts estimate that net income of approximately \$50 million per year for at least the next five years will be needed to meet the financial targets. Costs to run this utility are expected to increase in the environment of ever-increasing regulation and as we reinvest in our essential assets. As good stewards of Chelan PUD, we need to prepare for low-revenue and/or high-cost scenarios through actions like debt reduction. The financial policies approved in May, 2014 are intended to protect us against the “brown line” scenario shown in the cash forecast graph on the next page. However, there is also the possibility that our future will track more closely to either “blue line” scenario shown in the graph.





## Rate Implications and Service Sustainability

The potential “blue line” scenarios provided the basis for our conversation with the community about a “public power benefit.” In order to create value for stockholders, for-profit companies (such as investor-owned utilities) can offer stock dividends. As a public power utility, Chelan PUD can only provide additional benefits within our statutory authority. The most obvious way that Chelan PUD provides an ongoing benefit to the public is our very low electric rates. Importantly, Chelan PUD does not plan any changes in rates to increase revenues for the planning period — i.e. through 2019. Rate design issues that affect cost allocation between customer groups may need to be altered.

Avoiding rate increases is unusual in the electric industry. Already, Chelan PUD’s residential rates are 3.2 cents per kWh, compared to about 8.5 cents per kWh for Washington State and a nationwide average of 12 cents per kWh. During the next five years, the gap will grow wider if rates for the state and nation increase while Chelan PUD’s rates stay the same. During this strategic planning process, some have suggested that Chelan PUD should actually decrease residential rates to provide even more direct benefit to customer-owners. Others have suggested that Chelan PUD should increase rates to potentially have more revenue available for reinvestment in the county and to lessen the widening differential between our residential rate and those of other utilities.

This plan calls for a middle ground of maintaining revenues from electric rates at their current level, which are already significantly below the cost of production because they are supported by surplus hydropower sales. This approach best ensures we can meet multiple goals — reduce debt (the planned pay down of debt utilizes most of the surplus cash generated in the next five years); take a long-term perspective on reinvestment in our existing assets; and allow for a modest public power benefit.

Rate implications for other utility services will be influenced by how the Board of Commissioners decides to use public power benefit dollars. The sustainability of the water, wastewater and fiber systems has long been a topic in strategic planning at Chelan PUD. When we set guiding financial principles and policies in 2007, the Board’s policy guidance was that Chelan PUD should be an integrated utility service provider for electricity, water, wastewater, and fiber. Pursuant to this guidance, cash reserves for utility services were available to fund the capital needs of any Chelan PUD utility service. Providing integrated utility services meant that each utility service could share in the benefits of Chelan PUD’s wholesale electric sales.

This integrated-utility approach met with some challenges in 2009, when the economic downturn resulted in electric rate surcharges. Feedback from our customer-owners indicated that they preferred non-electric utility services cover their own costs. In 2012, after considerable outreach to customer-owners, the Board of Commissioners adopted a new policy for fiber services. In exchange for forgiving \$99 million of internal loans, the fiber optic network was directed to operate as a self-sustaining business with no new cash or loans from other Chelan PUD sources. The policy also set individual financial metrics for the fiber system. Later in 2012, the Board of Commissioners adopted individual financial metrics for the water and wastewater services. Board resolutions provided that these targets be reevaluated for consistency with Chelan PUD’s overall financial policies. Today, the water, wastewater and fiber systems still struggle to meet their financial metrics through system rate increases and cost reduction efforts alone.

The feedback collected as part of the community outreach for this strategic plan demonstrates that our customer-owners do place value on Chelan PUD’s water, wastewater and fiber services and are willing to invest in these services through a public power benefit. Consequently, some Board-adopted policies will need to be altered as a result of this strategic plan. For example, the Board is committed to reviewing cost allocation and rate design issues related to the wastewater system.

## **Customer-Owner Preferences for a Public Power Benefit**

In January of 2014, the Board of Commissioners launched a community conversation called ***Our Public Power: the Next Generation***. The intent was to engage customer-owners in a two-way dialogue about the future, to culminate in financial priorities—particularly for the investment of potential public power benefits, but also for reinvestment in Chelan PUD assets. To find out how our customer-owners would like to allocate a potential “public power benefit” if Chelan PUD has revenue available, we created six “Topic Teams” charged with evaluating the community’s priorities in: 1) Parks and Recreation; 2) Water and Wastewater; 3) Fiber and Telecom; 4) Electrification; 5) Economic Development; and 6) Reinvestment in the Business. These teams were comprised of members of the public and Chelan PUD employees.



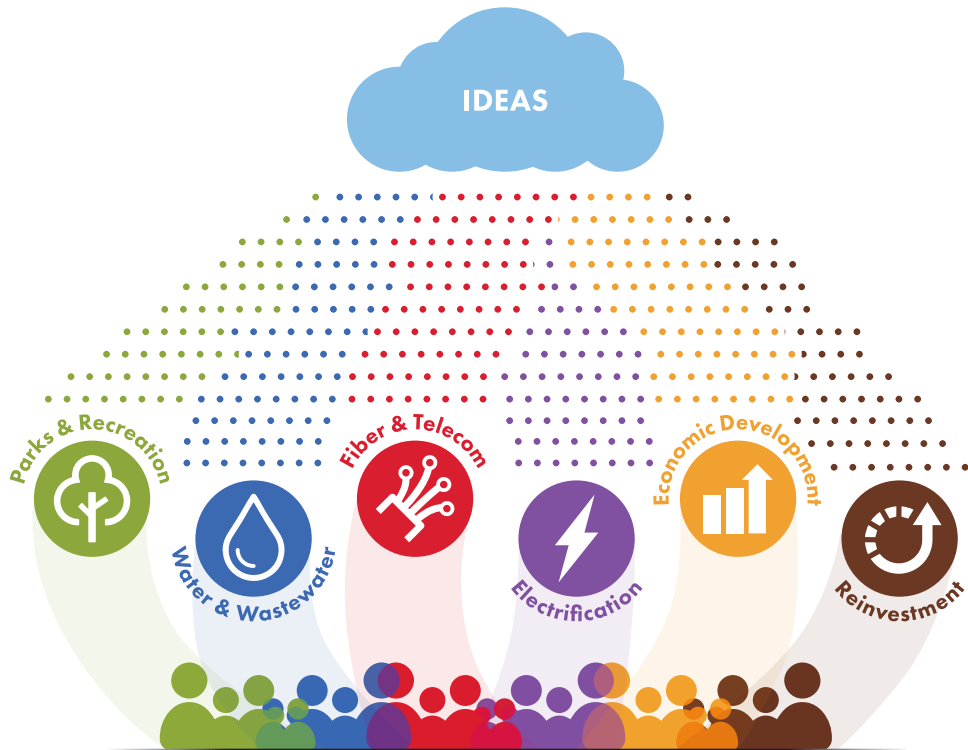
***First Strategy Partner meeting, July 2014.***

The Topic Teams reviewed ideas from more than a thousand pieces of input from the general public and from employees. Each Topic Team identified a set of options for further consideration by a group of community leaders known as the Strategy Partners. The Strategy Partners served as a source of community perspective to Chelan PUD’s Board of Commissioners, who ultimately decide which options to pursue and in what timeframe.

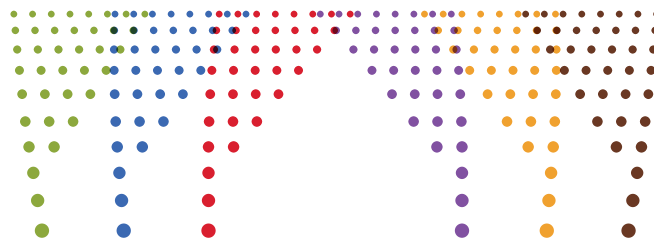
The graphic on the next page represents the “flow” of information that led to the development of the public power benefit portion of this strategic plan.

In addition, Chelan PUD conducted a large customer-owner survey seeking input on the Topic Team options. The survey was sent to about 40,000 customer-owners. More than fifty-four hundred customer-owners, including some Chelan PUD employees, shared ideas for investing in the future. The following summarizes the data collected.

PUBLIC SUBMITS IDEAS.



TOPIC TEAMS NARROW DOWN OPTIONS.



PUBLIC EXPRESSES PREFERENCES.



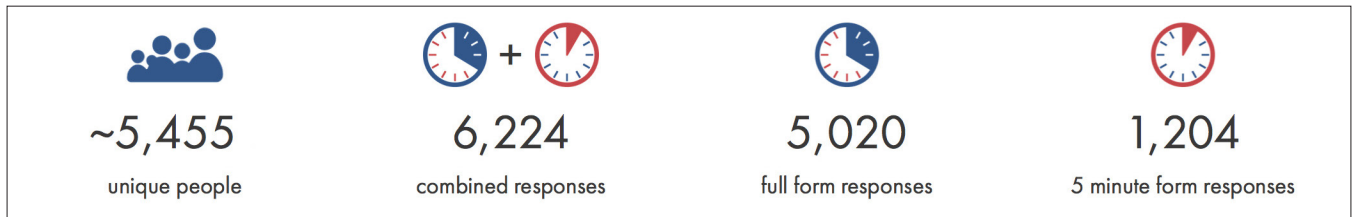
COMMISSIONERS SET PRIORITIES.

**strategic plan**



## Conversation Statistics

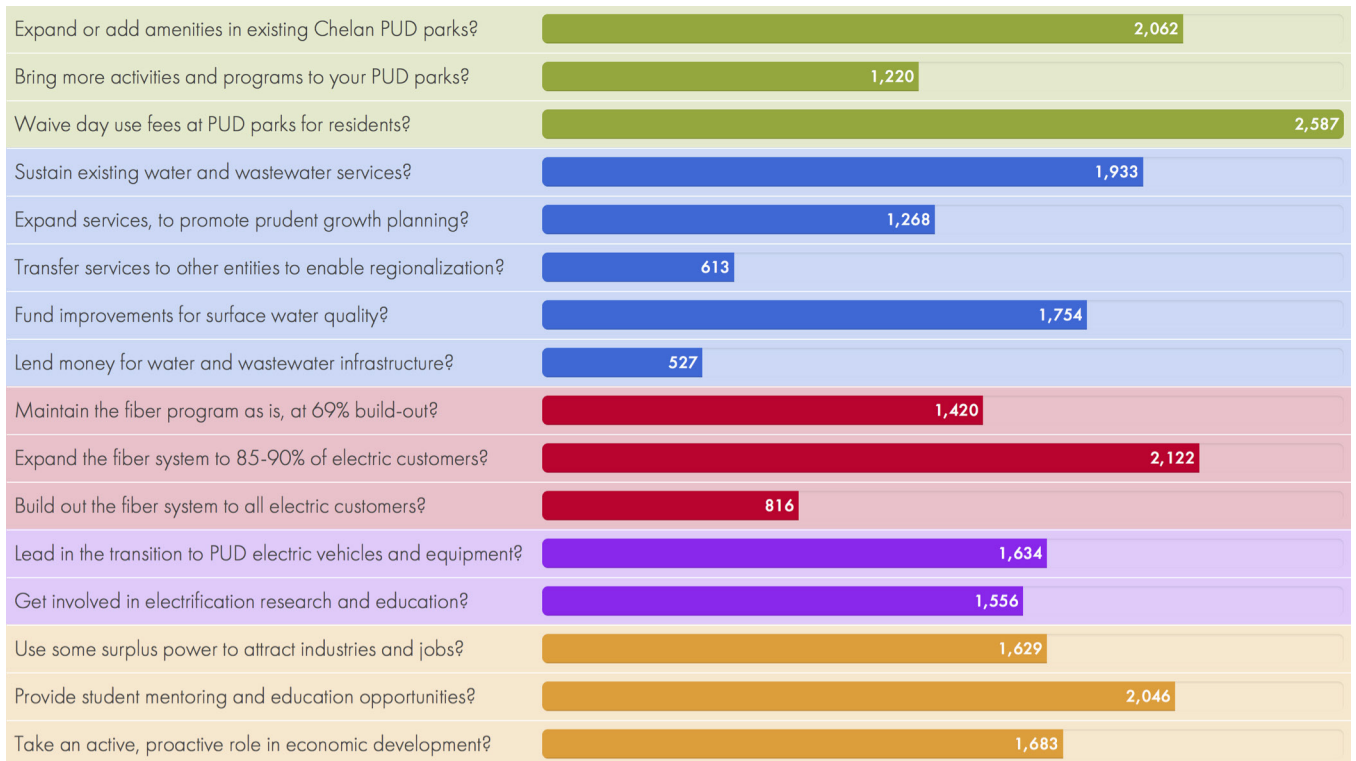
Participants were asked to respond to a full length form and/or an abbreviated 5 minute form.



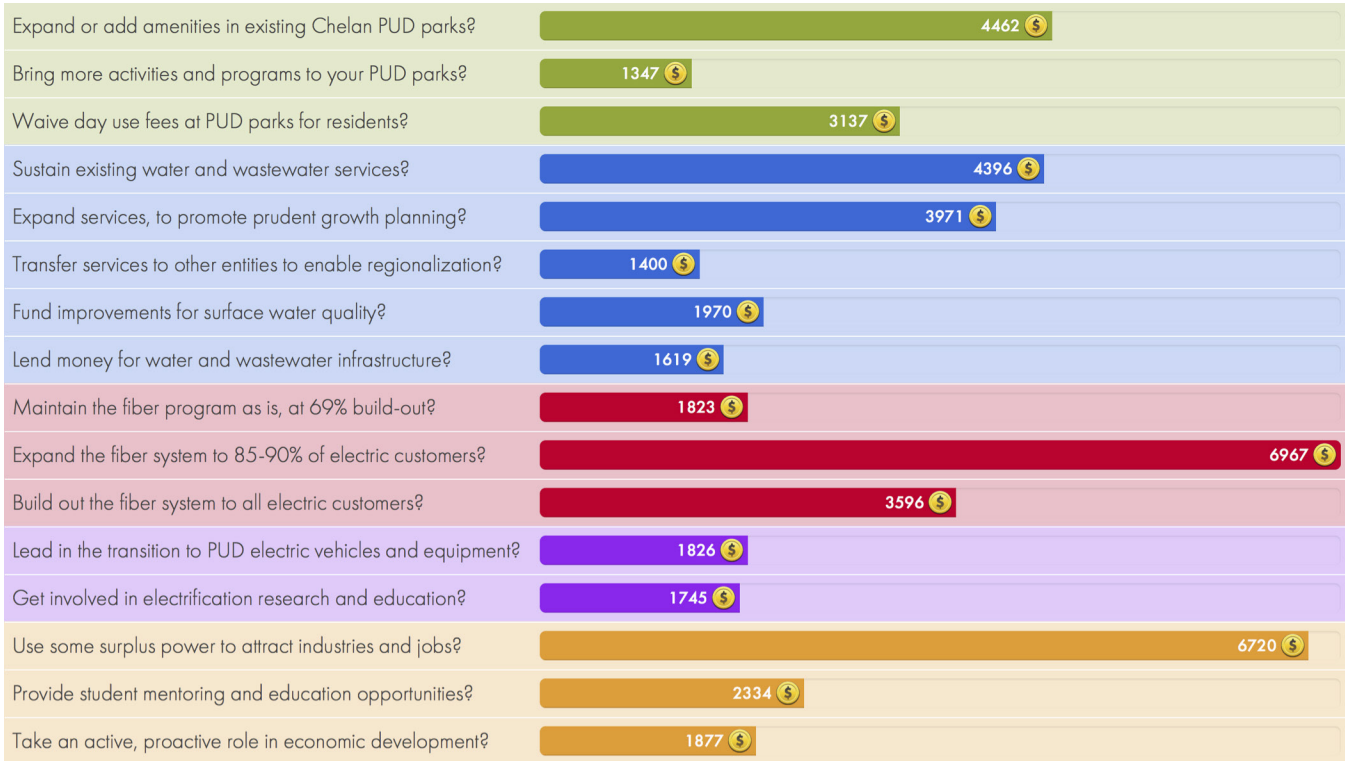
## Investing the Public Power Benefit

Customer-owners showed preferences by selecting options and investing a limited number of “coins.” Costs varied from one to four coins per option.

## Number of Times each Option Was Selected

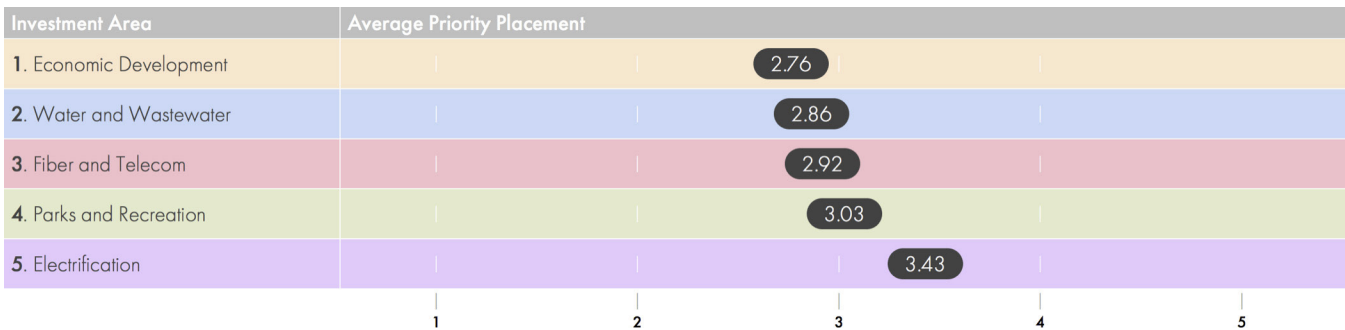


# Number of Coins Spent per Option



## Investment Areas Prioritized in Abbreviated Form

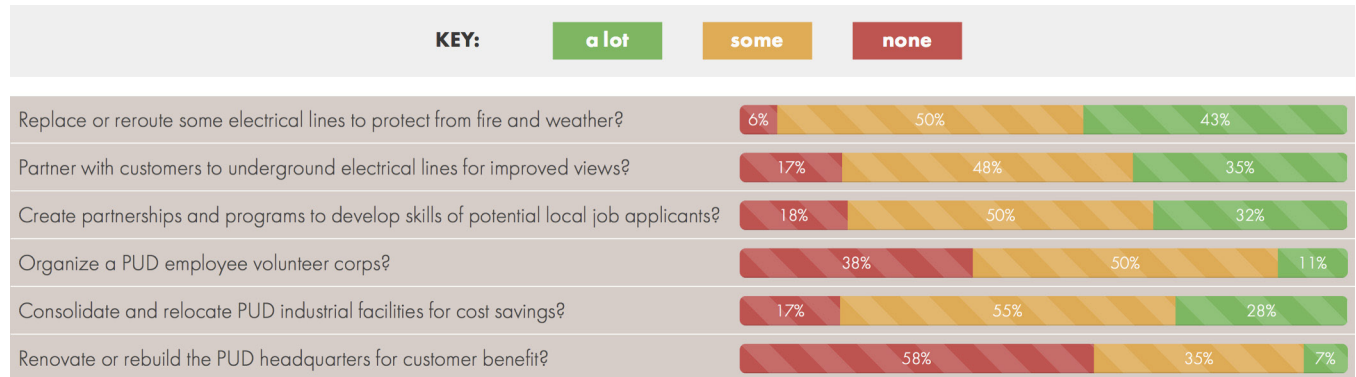
In addition, the survey showed how our customer-owners generally prioritized areas of investment. These priorities were averaged from 1,204 responses to an abbreviated, online-only five-minute form.



As a result of this process, a number of potential options for a public power benefit were identified for consideration by the Board of Commissioners. These options, and their associated costs, are detailed in *Attachment A, High Level Estimate of Annual Costs for Each Topic Team Option*.

## Feedback on Recommended Reinvestments

Beyond reinvesting in our core generation assets, Chelan PUD will be considering other reinvestments in our utility. Through the survey, customer-owners expressed how they perceived the value of several reinvestment recommendations. These preferences will be taken into consideration by the Board in future planning and budgeting cycles.



## Public Power Benefit Decisions

### Board Philosophy

Before deciding whether and how a public power benefit should be spent, Chelan PUD's Board of Commissioners established some principles — essentially representing a shared philosophy — regarding distribution of a public power benefit. These provide the context in which a public power benefit decision will be made. The Board supports an approach that is:

- **Responsive.** The allocation of public power benefit must be reflective of the views expressed by customer-owners throughout the process. For example, there was a high degree of interest expressed in expanding the fiber program and the Board's decisions reflect that interest. The Board has also decided to pursue elements from each of the Topic Team recommendations because of the high degree of support for all topic areas. The public power benefit need not be distributed equally among all areas covered by the Topic Teams, but should be done in an equitable manner based on the needs and desires of the community.
- **Financially Sound.** The Board supports reinvestment in the core business assets that create financial value, and thus the opportunity to produce a public power benefit. Chelan PUD's **first priority** will be maintaining our core assets. In addition, the Board supports accelerated buy-down of Chelan PUD's outstanding debt. To remain financially sound, the Board will evaluate all public power benefit decisions in the context of their impact on Chelan PUD's financial health. Importantly, the commitment to spend a public power benefit will not happen until after the necessary revenue is earned.
- **Manageable.** Public power benefit allocation and distribution should not create a complicated accounting process that absorbs staff resources better used elsewhere. As with other funds budgeted, there will not be carryover between years, and each year the public power benefit will be newly determined.

- **Measured.** The initial public power benefit will be set at a level that allows Chelan PUD to pilot the program and gain experience. In other words, the Board supports the notion that we will “crawl before we walk and walk before we run.”
- **Sustainable.** The Board supports sustainable business models for each utility service, but recognizes that they currently do not produce enough revenue to cover the capital costs needed that would put them on a path to sustainability. These systems could be “set up to succeed” by providing public power benefit funding for capital investments. However, the Board expects them to cover operation and maintenance (O&M) costs through rates. Because new capital projects create new O&M costs over time, the Board will closely evaluate new capital investments to determine whether future O&M costs can be covered in a sustainable manner. The Board supports managed, predictable and gradual rate increases over time for the water, wastewater and fiber systems, rather than significant increases all at once.
- **Consistent but realistic.** Some years, a public power benefit may not be available. The Board will do its best to smooth out funding and avoid possible interruptions to projects that take multiple years to complete, such as fiber expansion. However, the Board supports sustainable business models for each utility service. There is a Board commitment to the fiber expansion program, but the pace of expansion will be determined annually based on availability of funding. Additionally, if an expanded fiber network cannot pay its operations and maintenance costs, expansion can be curtailed.
- **Aligned.** The Board will reexamine existing policies, including cost-of-service issues, rate design and line extension policies, to ensure they align with this strategic plan.

### ***Budgeting for a Public Power Benefit***

Chelan PUD’s Board of Commissioners has heard what is important to this community and has established a “philosophy” for making public power benefit decisions. The next step is to incorporate “public power benefit planning” into our annual budgeting process.

Each year, the Board will determine whether there is any public power benefit funding available. In keeping with the Board’s intent to make financially sound decisions that protect against negative financial scenarios, a public power benefit will be derived only from revenue that is already earned and available after Chelan PUD has met all its financial metrics. Initially, the Board has determined a prudent starting point of 10 percent of this discretionary net revenue could be made available each year, at the direction of the Board, for a public power benefit while also not using more than 10 percent of the amount of cash the utility measures in excess of our financial target. This calculation could change over time (either increase or decrease), at the discretion of the Board, as financial conditions change and the program matures.

The first two years of the program will be somewhat unusual. We intend to begin the public power benefit distribution this year. However, we did not have the results of the community preference survey until our 2015 budgeting process was over. In a normal process, we would have looked at discretionary net revenues earned in 2013, designated the public power benefit amount in 2014 and budgeted for and dispersed funds in 2015. The same would be true for the 2016 public power benefit, which would be based on 2014 earned revenues, an amount designated in 2015, and budgeted for and expended in 2016.

The approach to budgeting and distributing the public power benefit this year will be slightly different because we are in the “start-up” phase. For the initial distribution, we will combine the 2015 and 2016



amounts to fund the selected projects. This amounts to \$4.5 million (for 2015) plus \$3.5 million (for 2016) for a total of \$8 million. Also during this start-up phase, many actions will start with studies and feasibility analyses of the options to determine the most beneficial paths forward.

All budgeting decisions for future public power benefits will be affected by Chelan PUD's financial outlook each year. It is interesting to note that since the beginning of this strategic planning process, the liquidity graph has already changed several times. Because it is a forecast, it will always be moving — and thus our expectations about a public power benefit need to be adjustable as well.

### ***2015/2016 Public Power Benefit Decisions***

The number one way that we provide public power benefit to all Chelan PUD customers is by keeping electric rates low. Each month, low rates keep the benefit in your pocket through your electric bill.

In addition, Chelan PUD's Board of Commissioners reviewed public input on the Topic Team options for use of the public power benefit. See *Attachment B* for financial estimates of the options. After considering the options through the lens of the Board's shared philosophy, they determined that the following options will receive public power benefit funding in the 2015-2016 timeframe.



***Topic Team meeting, June 2014.***

## Parks and Recreation



- Conduct a pilot study during 2015 and 2016 for waiving or reducing day-use fees for Chelan County residents who use Chelan PUD parks operated by Washington State Parks (Confluence, Lincoln Rock and Daroga). \$500,000 starting in 2015 through 2016 or until the budgeted amount is used, whichever comes first.
- Conduct a feasibility study to determine the potential for providing a continuous water source for the Horan Wildlife Area in order to preserve the wetland trail and education experience. \$50,000
- Conduct a feasibility analysis for a splash-pad in a Chelan PUD-owned park. \$150,000

## Water and Wastewater



- Sustain existing water and wastewater services by providing capital funding to set these systems up for success. Initial funding will come from the 2008 Capacity Reservation Funds and it is anticipated that future capital assistance can come from public power benefits. Going forward, there is also an expectation that rate increases of approximately 2 percent for water and 5 percent for wastewater per year for the five year planning period are necessary to cover O&M. Rate increases after the five-year planning period are expected to reflect inflation unless unanticipated events occur.
- Conduct legal analysis to explore Chelan PUD authority for further system expansion. \$30,000
- Continue the current study evaluating system opportunities for operational efficiencies between entities. \$50,000
- Investigate Chelan PUD's legal authority to fund improvements for surface water quality. \$10,000

## Fiber and Telecom



- Restart the fiber expansion using public power benefit for expansion capital costs.
- The expanded fiber system is expected to cover its own O&M costs.
- Initial funding of fiber's proportionate share of PUD shared capital assets will come from the 2008 Capacity Reservation Funds and it is anticipated that future shared capital assistance may come from public power benefits.
- Capital and O&M cost estimates will be validated through engineering and construction analysis on an ongoing basis.
- Sustainability of the expanded system is predicated on the assumption of a 40 percent take-rate from premises passed, construction conditions, and actual material costs during build-out.
- The goal, if a public power benefit can be sustained, is to move from 69 percent to 85-90 percent of current county residences having fiber accessibility within 11 years, \$3.7 million for 2015 and 2016, with a total estimated program costing \$25 million over 11 years.

# Electrification



- Install vehicle chargers at PUD facilities (nine Level 2 chargers). \$45,000
- Make electrification education part of the education and mentoring program outlined below.
- Continue internal evaluation of a conversion of fleet vehicles and equipment to electric when cost-effective. If the cost-effectiveness analysis demonstrates that the conversion is not cost effective, revisit vehicle and equipment electrification in future years for possible use of a public power benefit.

# Economic Development



- Develop an economic analysis tool to help evaluate net impacts of new electric loads due to new or expanding business. The evaluation tool will assist in determining power service contract terms and conditions. \$250,000
- Develop utility-focused education and mentoring programs. \$200,000 (two-year commitment)
- Take an active role in economic development from a basic infrastructure perspective, committing staff time and study resources. \$200,000

It is anticipated that funding for future public power benefits will consider new ideas from customer-owners as well as ideas from this process that did not make the funding list.



Chelan PUD also sought input from the public on one other category — reinvestment in our core assets. Reinvestment in the core assets is not a use of public power benefit funding. Instead, it is a fundamental part of ensuring that this utility continues to provide value for the long-term. However, Chelan PUD’s Board of Commissioners wanted to ask our customer-owners about their preferences regarding some reinvestment options that Chelan PUD could prioritize or accelerate based on public input. These options go beyond the fundamental investments necessary to maintain the capability of our hydropower, transmission and distribution systems.

# Reinvestment



Our customer-owners were most interested in replacing or rerouting some electric lines to protect against fire and weather risks. Other high-ranking items included partnering with some customers to underground electrical lines, consolidating Chelan PUD’s industrial facilities, and creating partnerships or programs to develop the skills of local job applicants. The Board confirms their commitment to reinvesting in the core, value-creating assets of hydro projects, distribution systems, facilities and people as the top priority and will use the **Owner’s Guide** (<http://www.ourpublicpower.org/guide>) feedback to help prioritize reinvestment options. Increased reinvestment projects and programs will be reflected in our

internal planning and budgeting processes for 2016 and beyond and will include increased focus on protecting reliability through rehabilitations and replacing aging infrastructure as well as further protecting against storm, fire and other damage. Planning processes will include business case analysis and the resulting increases in technology and staffing resources needed to support the reinvestments with the ultimate goal of providing long-term value for customer-owners.

## Allocation of Capacity Reservation Funds

Through this strategic planning process, we also have important steps to take that build upon actions initiated in 2006-2007. In 2006, Chelan PUD signed a power sales agreement with Puget Sound Energy that was not effective until 2011/2012. As part of this agreement, Chelan PUD received a prepayment of “capacity reservation funds” to reserve capacity from Rocky Reach and Rock Island. The funds were designated for any use at the discretion of Chelan PUD and were held in a separate fund until we determined how to use them. As part of the governing policies put in place in 2007, Chelan PUD’s Board of Commissioners directed Chelan PUD staff to disburse these funds to the electric, water, wastewater and fiber systems to repay internal obligations and fund future capital needs. The funds were distributed as follows: \$53 million to the electric system; \$21 million to the water system; \$18 million to the fiber system, and \$2 million to the wastewater system.

In 2008, additional capacity reservation funds were received when a power sales agreement with Alcoa was signed in 2008, which also was not effective until 2011/2012. The 2008 funds, which total about \$33.2 million, are also designated for use at Chelan PUD’s discretion. Currently, they are being held in a separate fund until the desired use is determined. As part of this strategic planning process, the Board of Commissioners has decided to allocate \$4.5 million to the fiber system, \$8.7 million to the water system, and \$3.9 million to the wastewater system to cover internal loans, past internal obligations for shared capital assets, future capital needs through 2019 for water and wastewater, and future shared capital asset needs through 2019 for water, wastewater and fiber. The remaining \$16.1 million of funds will be maintained in the electric distribution system as a reserve to help temper the variability of any annual public power benefit so that multi-year improvement projects have more predictability around funding and construction.

## Core Business Strategies (Five-Year Business Plans)

Decisions around a potentially-available public power benefit are important. The public power benefit conversation provided the platform upon which we reached out to our customer-owners to talk about this utility’s future as an economic partner in this county. However, for there to be a public power benefit, we must do an excellent job of managing the core business units.

Understanding an organization’s strengths, weaknesses, opportunities and threats (SWOT) is a critical part of strategic planning. A SWOT exercise helps organizational leaders identify issues and then better position an entity to preserve and enhance its strengths and to mitigate its weaknesses. An effective SWOT analysis will also motivate decision-makers to take advantage of opportunities and protect against potential threats. Effectively, a good SWOT analysis will help a strategic planning process identify what needs to be done to improve an organization over time.

While the Mission and Vision defines why we exist, a strategic plan is also about what we will do to support the Mission and Vision. Chelan PUD’s SWOT analysis shows a utility with strengths that we can all be proud of. However, our weaknesses, opportunities, and threats all point to areas where we may need to reinvest — either in our assets or in our employees — to make the most of our future.



# Strengths, Weaknesses, Opportunities and Threats

*A traditional analysis performed in strategic planning exercises is to consider an organization's strengths, weaknesses, opportunities and threats (SWOT). The strategic conclusions included in this document are based on a SWOT analysis. A SWOT analysis can be best performed by considering two key elements that create value for Chelan PUD's customer-owners: (1) physical assets and (2) people.*

## Strengths:

### Physical assets:

- A very low cost, flexible, non-carbon emitting hydropower supply of electricity that produces roughly six times the amount needed to serve the County's population. This allows Chelan PUD to sell surplus power into wholesale electric markets at prices that exceed the cost of production.
- Highly reliable distribution system, which meets a goal of 99.99 percent reliability most years.
- A strong habitat conservation program, endorsed by regulators, in place to mitigate the environmental impacts of the hydropower assets on salmon and steelhead.
- Operation of the major Pacific Northwest electricity trading hub in the mid-Columbia region.

- High quality fiber system with broadband access to roughly 69 percent of the county, which exceeds nearly all other rural counties.
- A parks system that is highly appreciated by local users and attractive to visitors.

### People:

- A dedicated team of employees with deep understanding of the operation of the physical assets and a deep commitment to the foundational public power business model of community service focused on customer-owners.
- Highly satisfied customers. (91.8 percent satisfied or very satisfied based on a 2014 survey).
- A community that cares deeply about the success of Chelan PUD.

## Weaknesses:

### Physical assets:

- A very heavy reliance on three hydropower assets while carrying a substantial amount of debt, along with the risks associated with extended unit outages, streamflow, market prices and downstream location from the river basin's largest water storage project.
- Assets that may be feeling the stress of the recent "financial preservation" economic environment that led to reduced investment.
- Water, wastewater and fiber business units that generally do not cover their associated costs.
- The continuing evolution of environmental risk, such as fish issues and climate change.

- Nationally-significant assets engaged in highly-regulated activities that are significantly impacted by federal and regional policy — all while being only "mid-size" among more than 3,000 utilities.

### People:

- As throughout the utility industry, an aging workforce with associated risks of loss of institutional memory and willingness to grow and change.
- Good but not great safety record and regulatory compliance culture.
- Decisions that can be less than fully integrated and aligned around a strategic framework.

## Threats:

### Physical Assets:

- Possible loss of local control over generating assets.
- Future cost and uncertainty related to Rock Island relicensing.
- Changes to public policy that reduce local control over transmission or increase compliance costs.
- Extended outages due to natural disaster, inadequate maintenance, or investment in refurbishment.
- Significant changes to market prices due to market fundamentals or market structure through regulation or market design.
- Substantial streamflow changes due to annual variability, climate change, or upstream reservoir operations.
- Substantial negative impacts on revenues and expenses associated with national and regional policies.

- Changes to the Columbia River Treaty that create a net loss for customer-owners.
- Initiating a “public power benefit” that increases cost structure, followed by a decline in net revenue.
- Large new loads that utilize low cost electricity but provide little benefit to the county.
- Potential cyber or physical security threats, along with increasing regulatory structure associated with grid reliability and security.

### People:

- Loss of institutional memory through retirements.
- Loss of connection to community service as fundamental to the business model.
- Inability or unwillingness to grow and change as the community and industry evolve.

## Opportunities:

### Physical assets:

- Having the financial resources to reduce debt and invest in preventative maintenance and timely refurbishments based on long-term value to customer-owners.
- Evolving markets that are likely to place an increasing value on non-carbon emitting, renewable, flexible generating assets.
- Ability to hedge price, streamflow, outage and environmental cost risks.
- Potential to help address key national objectives in a manner that benefits Chelan County (e.g. energy efficiency investments).
- Ability to take a long-term perspective about value to Chelan County and the environment.
- Connection to customer-owners and improved satisfaction through the way we do business (our values).

- Opportunity to enhance value for customer-owners through modernization of the Columbia River Treaty.
- Potential to increase value through improved coordination of river flows.
- Potential to offer a public power benefit with surplus revenue that creates value for customer-owners.

### People:

- Translating inherent commitment to community service into even higher levels of customer satisfaction.
- Providing the tools and the business environment to improve skills, national and regional awareness, safety and compliance culture.
- Ability to increase delegated authority within sideboards that promote operating within an aligned, “one-utility” perspective that creates clear accountability.

The SWOT analysis helped Chelan PUD identify its seven Strategic Objectives.

## **Chelan PUD Strategic Objectives for 2015 and Beyond**

### ***1. Commit to the highest level of customer-owner satisfaction.***

Everything we do should be for the benefit of our customer-owners. We will take a strategic, long-term view of implications of our decisions. Our policy decisions will be built around enhancing overall customer-owner satisfaction. Our employees will interact with customer-owners in an empathetic, proactive, and attentive manner, making sure people feel like individuals and are heard. As a utility, we will take a county-wide perspective when considering the impact of all our decisions. When possible under our financial metrics, we will provide a public power benefit built around enhancing the quality of life for customer-owners as they define quality of life.

### ***2. Invest in creating long term value.***

We will define plans and make resources available to invest in all our physical assets (generation, transmission, distribution, fiber, parks, water and wastewater) based on a long-term value perspective. We will continue our actions to reduce the volatility of wholesale power sales revenues while also seeking ways to enhance revenues. We will seek to work with our industry colleagues as much as possible, in a collaborative manner build around long-term relationships. Because relationships are important to us, we will look at the spirit and intent of issues rather than just the “letter of the law.” Investing in the source of our organization’s financial value will give us the best opportunity for deriving future public power benefits.

### ***3. Protect natural resources impacted by operations.***

We will meet or exceed statutory requirements and commitments to mitigate for the environmental impacts of all our actions. As part of this objective, we will think ahead and seek out “least-cost” alternatives for meeting emerging societal environmental goals.

### ***4. Ensure financial stability.***

We will sustain a financial structure that seeks to avoid raising revenue from electric rate increases through the upcoming five-year period (and potentially beyond) under all plausible scenarios and create access to low cost capital when needed.

### ***5. Make continuous improvements in efficient, effective, compliant and risk-assessed operations.***

We will rigorously and holistically review spending and policy decisions using strong risk assessment practices to assure best value. We will comply with all statutory requirements. We will seek out, evaluate, and utilize new technology that is ready for deployment if there are sufficient economic and customer benefits.

### ***6. Enhance the capability of Chelan PUD staff.***

We expect and support that every employee will advance his or her skills for the benefit of customer-owners. We will cultivate a utility culture that focuses first on customer-owner satisfaction. We seek to be recognized as industry “thought” leaders on all issues relevant to our operations. We focus on results using the “cycle of personal ownership” throughout projects and policy development.

## ***7. Make our values the focus of relationships with customers, stakeholders and each other.***

We will promote a safety culture that permeates throughout this organization. We will make decisions based on being the stewards, not the owners, of assets owned by the people of Chelan County. We communicate about and seek input on key policy issues. We seek to be trustworthy through continuously improving our job competence, acting with integrity and focusing on collaboration in all our relationships. We will build long-term, collaborative relationships by creating partnerships and alliances with stakeholders and industry allies.

## **Core Business Strategic Actions**

Each of our business units are responsible for implementing these Strategic Objectives through actions or initiatives that align with the objectives. The work described in these business unit five-year plans is fundamental to our operational success.

### ***Generation and Transmission***

While the hydropower projects are fantastically productive assets, we need to catch up on some deferred repairs and replacements. Some of these projects were put on hold during the recession; some had to wait while Chelan PUD managed a response to the situation at the downriver Wanapum dam; and others were recently identified. At Rocky Reach, we will be rebuilding four large generating units after a design flaw was detected in 2013. The long-term repairs will restore the movable turbine blade capability and make other repairs expected to extend the life of the equipment for at least another 30 years.

Several other big generation projects are planned for the next few years — such as unit rehabilitation and modernization for Rock Island, significant electrical upgrades at Rocky Reach and Rock Island; crane upgrades at Rocky Reach and Rock Island; seismic retrofitting at all three plants, replacement of the Rocky Reach Juvenile Bypass System Surface Collector Pumps; and rewinds of the Rocky Reach large generating units.

A major initiative for the Generation and Transmission (G&T) business unit is to further develop a long-term asset management plan. Although each dam's equipment has been operated and maintained to a high standard, age and condition issues have increasingly caused forced outages, unanticipated failures, and lost generation. In addition, environmental risks related to the use of hydraulic oils must be minimized. An asset management plan is designed to provide a long-term strategy for maintenance and refurbishment in a manner that optimizes long-term value for our customer-owners.

Chelan PUD is currently developing a hydro asset management plan that will include full condition monitoring of all units. It is intended to reduce catastrophic risk to the dams and meet hydro reliability standards at the least cost and within our financial policies.

### **Strategic Actions**

- Catch up on deferred repairs/replacements
- Implement turbine/generator repairs/refurbishments
- Further develop hydro asset management program
- Meet new and changing regulatory requirements
- Continue Rocky Reach and Lake Chelan License Implementation



In addition, G&T will be working with the District Services business unit to implement the relatively new federal licenses for the Lake Chelan and Rocky Reach Projects. Also, within the next few years, preliminary planning will begin for Rock Island Project relicensing. We are proud of our history of protecting fish and wildlife, and intend to meet all aspects of our license requirements while demonstrating that we remain the best owners and operators of these assets now and into the future.

On the transmission side, Chelan PUD is evaluating the need for transmission redundancy in the Upper Valley to further reduce the risk of outages. Plans are in the works for a transmission asset management program as well to better coordinate transmission investments. Several projects are being planned to improve control and security systems and to conduct line improvements, relocations and rebuilds. For example, we support the construction of the Northern Mid-Columbia Joint Project, which we believe will reduce transmission congestion for Mid-Columbia generating utilities and allow for increased capacity to accommodate system growth.

While less visible to the public than laws and regulations for fish and wildlife, regulations for transmission infrastructure and the bulk electric system have changed significantly during the last decade. The Energy Policy Act of 2005 created a framework of regional and federal oversight for transmission reliability standards. Chelan PUD is an electric balancing authority and has significant generation that makes us subject to a large array of federal reliability and cyber security standards. Chelan PUD has an excellent record of compliance with these standards. However, for a modest-sized utility that has little ability to impact the bulk electric system and a small transmission compliance and operations staff, we support better alignment of costs with risk levels and are seeking a less resource-intensive compliance approach.

Transmission policy is also changing as a result of the Federal Energy Regulatory Commission's Order 1000, which mandates cost allocation for new transmission lines to entities that enroll in regional transmission planning. Chelan PUD is a member of ColumbiaGrid, a transmission planning organization in the Northwest. While we will continue to be a member, we have no plans to enroll in a process that could allocate costs of a new transmission line to Chelan PUD customers without a decision by our Board of Commissioners and in the absence of a contract.

### ***Energy Resources***

As stated earlier, our ability to keep rates low here at home rests on our successful marketing of wholesale power. Therefore, it is crucial that we maintain, and where possible, maximize the value of these resources.

While surplus power is a significant benefit to Chelan PUD, it can complicate financial planning because of four related uncertainties: 1) streamflow or water availability; 2) power prices; 3) resource outages; and 4) regulatory constraints that affect the flexibility of our power generation. These uncertainties are comprised of many factors which make it exceedingly difficult to predict Chelan PUD's revenues and, in turn, our exposure to financial risk. In 2010, Chelan PUD's Board of Commissioners approved a strategy to mitigate wholesale power risks through a hedging program. This program substantially reduces the volatility of wholesale revenues. Under this program, Chelan PUD sells surplus hydropower using a combination of "slice of the system" contracts and mid-term and short-term contracts. The following table illustrates how Chelan PUD's hydropower output is allocated, including long-term contracts with regional utilities and county retail electric use. The highlighted portion represents Chelan PUD's flexible surplus power. We intend to maintain this hedging policy going forward.

Percent of total average generation	Generation of Combined Rocky Reach, Rock Island and Lake Chelan Hydroelectric Projects	
100%	Average Generation (normal conditions)	1,100 aMWs
17%	Chelan County retail customers	190 aMWs
52%	Long-term contracts. Long-term power purchasers include Alcoa at 26% of Rocky Reach and Rock Island output; Puget Sound Energy at 25% of Rocky Reach and Rock Island; and Douglas County PUD at 5.54% of Rocky Reach only)	572 aMWs
22%	Mid-term contracts. Mid-term hedging program, featuring "slice of the system" market-based products.	244 aMWs
9%	Short-term contracts. Current-year hedging program.	94 aMWs

In order to have enough revenue to provide a public power benefit, enhancing the proceeds from these power sales is key. However, west coast power markets are going through a period of transformative change. Significant amounts of wind and solar are entering the grid, representing lots of energy generation but less capacity to protect against reliability events. In California, which represents roughly half of the western power market, so much solar is being added that it could alter the traditional seasonality of power exchange with the Northwest that has seen power flow south during the summer cooling season and north during the winter heating season. Throughout the west, there is a growing need for capacity resources and operational flexibility to ensure that power can be delivered reliably regardless of whether variable energy sources are generating power.

For hydropower generators, this means that markets must ensure that both the fixed capital and opportunity costs of hydropower are priced to recognize the unique capabilities and integration services that hydropower provides. These valuable attributes are essential to maintaining grid reliability in an era of plentiful wind and solar and scarce baseload and flexible capacity resources. However, it is not entirely clear how developing markets may or may not place a value on hydropower's attributes. Chelan PUD's Energy Resources business unit is tasked with developing and marketing power products that fit the emerging marketplace and provide our customer-owners with optimum value for the system.

In addition to operational needs, public policy can also create demand for certain types of power. At the policy level, decision-makers are increasingly focused on reducing carbon emissions from the electricity sector. In 2014, the Environmental Protection Agency announced its draft Clean Power Plan to reduce electric sector emissions 30 percent below 2005 levels by 2030. And, Washington State's Governor Inslee unveiled his Carbon Pollution Accountability Act which would set an annual limit on the total amount of allowable carbon emissions. Policies like these that essentially

## Strategic Actions

- Maintain hedging program
- Increase revenues through new energy-related services and products
- Optimize conservation benefits to customer-owners by improving conservation capabilities and resources
- Manage emerging issues and market risks and opportunities by improving policy-level analytical capabilities and resources
- Continue to improve processes and tools to optimize river operations and revenue opportunities by improving analytical capabilities and resources

put a “price on carbon” could also provide a price signal that adds value to emission-free power. Electric utilities are essentially at the forefront of carbon emission reduction efforts. And, in theory, Chelan PUD should be well-positioned to meet this new objective.

To learn more about carbon emissions and other public policy issues of interest to Chelan PUD, see *Attachment C, Policy Environment*.

Chelan PUD’s generating mix is free of carbon emissions, with three hydroelectric projects and a small share in the Nine Canyon Wind project, located in Benton County, Washington. Depending on how carbon policy develops at the state level, Chelan PUD should not have significant liability in terms of direct carbon reduction requirements. However, complementary policies could affect the degree to which hydropower can be a cost-effective carbon reduction tool in Washington State. These policies could also influence how costly carbon reduction efforts will be for the electric utility industry and the State of Washington.

Because of the characteristics of our existing portfolio, Chelan PUD chooses to pursue additional generating resources or conservation only when the cost is below the current market price of wholesale power. For Chelan PUD, this means that there is potential for additional low-cost energy efficiency to make economic and environmental sense in this county. As previously discussed, increased energy efficiency means more power is available to sell on the wholesale market, keeping local electric rates low. Our programs for residential homes and incentives for industrial and commercial customers are popular and being utilized. Since 2010, we have acquired almost 7.6 average megawatts of conservation.

With an increased focus on energy efficiency as a carbon reduction tool, we intend to over-achieve on our state-mandated conservation targets in the coming years. We will make sure that we consider all wholesale market implications of our hydropower asset management program and continue to improve processes and tools to optimize river operations. This means that all our decisions about when, whether and how to upgrade or expand our projects will be done with a thorough understanding of the state of the wholesale power market. We will invest to increase this competency within our utility.

In 2017, the existing agreement for the Hourly Coordination of Projects on the Mid-Columbia River will come to an end. For a number of reasons, Chelan, Douglas and Grant County Public Utility Districts initiated a process to replace the agreement prior to its scheduled termination date. We continue to believe there is value in Mid-C coordination and the primary power-trading hub for the Pacific Northwest which is at the Mid-C. We also believe we have a responsibility to the region to ensure the Mid-C trading hub continues as a source of liquidity that benefits western power markets. As the agreement is renewed, we will seek to further optimize coordination, particularly as the value in western power markets shifts.

Because the financial health of our utility depends on our surplus power sales, we plan to engage in market formation activities, at both the regional and national levels, that could impact the value of this surplus power. Going forward, our Energy Resources business unit will continue to analyze evolving markets and participate in regional efforts to design markets and provide energy products that appropriately value hydropower for its grid reliability and carbon reduction benefits. In doing so, we can work with other hydropower owners to make sure that hydropower is not overlooked or undervalued as a tool to achieve state and federal energy policy goals. This means improving our policy-level analytical capabilities and resources.

## Customer Utilities

The Customer Utilities business unit is at the front line for providing safe, economic, and reliable customer utilities. It is responsible for distribution engineering, substation operations, distribution line operations, and water/wastewater system planning and operations. A goal for the whole Customer Utilities business unit is to continuously improve the customer experience. This business unit has the most direct contact, on many levels, with our customer-owners. While Chelan PUD scored very well on customer satisfaction during the survey we conducted in 2014, there is always room for improvement and we will strive to find ways to provide an optimal customer experience.

- **Electric Distribution System**

Customer growth across the entire electric distribution system generally runs between 0.8 percent to 1.8 percent annually, but we are currently experiencing renewed growth in large commercial loads as well as a forecasted increase in housing starts. This is a very asset-intensive business with more than 33 power substations, hundreds of miles of overhead and underground cable systems, and over 22,000 wood poles. Weather is the biggest culprit when it comes to electric system outages, but equipment failures related to aging and fatigued infrastructure account for about 15 percent of our reliability issues. The need to replace much of our aging infrastructure is a growing issue so that we can maintain or further improve our electric reliability.

The Customer Utilities business unit will use new asset management tools to make informed decisions about maintenance cycles and optimization of life cycle costs. We intend to make steady, proactive investments in our distribution assets in order to prevent, to the extent possible, large-scale infrastructure replacements. Maintenance programs have been developed and continually reviewed for critical assets such as wood poles, substation power transformers, breakers, batteries and underground cable. We also will make strategic investments in system improvements and adding capacity to serve new electric loads.

Besides aging assets, the biggest issues facing the electric distribution system are public policy questions. Across the nation, demand is on the rise for distributed generation — generation that is owned not by a load-serving utility, but by a customer or third party. Chelan PUD is responding to such evolving customer interests and preferences by evaluating how these requests provide

## Strategic Actions

- Further improve customer satisfaction
- Improve asset management through condition assessments
- Enhance electric reliability in response to major events
- Develop a vision for demand response, smart metering, outage management, and enhanced customer offerings and services
- Proactively address evolving issues such as distributed generation, net metering, and new large loads
- Develop and implement financial sustainability plans for the water and wastewater systems
- Complete system improvements necessary to meet wastewater regulatory requirements for the Peshastin, Dryden and Lake Wenatchee systems
- Update the comprehensive water system plan for Chelan PUD's system



our customers choices, but could also present challenges to our principles of local control as new regulations emerge to govern these relationships. This year, our Board of Commissioners considered a set of guiding principles for responding to distributed generation requests in our service territory. We support these investments to the extent they give our customers choices, but oppose any initiatives that compromise local control, particularly over costs and rates. In addition, we strongly believe that customer investment in distributed generation must protect safety and reliability and be financially equitable for all customers. In other words, costs associated with supporting distributed generation endeavors should not raise costs for other customer-owners. Finally, we support the development of consumer protection measures through state policy.

Another very significant trend in the electric industry is the development of a smarter electric grid. Chelan PUD deferred the roll-out of advanced metering in 2008/2009, but has been monitoring the development of the technology and the benefits it could provide. We are currently exploring and evaluating the option of installing two-way meters for the largest 500 customer meters, which account for 40 percent of the annual average retail electric load. As funding is available, we will continue to explore how new technologies can bring benefits to our customer-owners through demand response, energy conservation, critical peak pricing, better outage notification, and pre-paid services. The Board of Commissioners will play an active role by adopting principles for implementation and an associated action plan.

The most significant issue from a strategic perspective is the increase in requests we have received for new electric loads greater than 1 megawatt. Generally, these applicants are associated with data centers or server farms from outside the area that intend to locate new facilities in existing industrial buildings. Prior to 2013, we experienced an average of less than two large load applicants each year. Since 2013, we are experiencing an average of six to ten requests per month.

New load applications of this magnitude require a comprehensive study to evaluate the impacts on system capacity planning, energy load characteristic modeling, and system improvement planning. They also have major implications for the future of Chelan PUD's business model, which relies on wholesale power sales of surplus hydropower to keep retail electric rates low. In December, 2014, Chelan PUD's Board of Commissioner placed a moratorium on accepting applications for new loads over 1 average megawatt at a single location so that we could fully consider how these requests impact the distribution system and how they could best be served. As part of this process, the Board of Commissioners will be considering options, including updates to Chelan PUD's rate design and policies.

- ***Water and Wastewater Systems***

Chelan PUD's water system currently serves approximately 5,800 customers, with an annual growth rate of about two percent. The water system has a stable financial outlook, with rate revenue now covering operating expenses after the Board of Commissioners approved a rate adjustment in early 2014. However, there are limited funds left to address capital needs of the system, including replacement of aged water lines in areas with a high frequency of leaks.

Chelan PUD's wastewater system currently serves approximately 500 customers, with an annual growth rate of about one percent. Wastewater system rates cover less than 65 percent of the cost of daily operations, which is forecasted to deplete the system's cash savings by 2016. In addition to daily operations, capital funding is required for environmental protection projects, such as meeting

phosphorus requirements for the Peshastin and Dryden facilities and nitrate requirements for the Lake Wenatchee facility. While some state grant funding is anticipated, in November 2014 the Board of Commissioners approved an internal loan of up to \$3.5 million to the wastewater system. Customer Utilities will be developing water and wastewater system sustainability plans that consider how to responsibly provide safe and reliable services while charging rates that do not create hardship for the customer-owners. Rate adjustments, an allocation of “public power benefit,” or a combination of the two will be required to make the systems sustainable.

The benefits of Chelan PUD’s water and wastewater systems extend far beyond the ratepayers these systems serve. Reliable water and wastewater service has supported the development of land that would have otherwise not been possible. Provision of wastewater service has supported considerable development around Lake Wenatchee for years. The economic benefit to Chelan County is significant. In most cases, local contractors are hired to develop properties and build homes. Residents and visitors spend money that benefits local merchants. Chelan County enjoys the continuous benefit of both property tax and sales tax revenues. Much of this benefit would not have been possible had Chelan PUD not installed the wastewater system.

In addition, prior to 2000, development of the Sunnyslope area was at a standstill due to inadequate water supply. Chelan PUD upgraded the water system and today hundreds of homes occupy the Sunnyslope hills. Similar to the Lake Wenatchee area, local contractors are hired to develop properties and build homes. Residents and visitors shop locally and Chelan County enjoys the continuous benefit of both property tax and sales tax revenues. Much of this benefit would have not been possible without PUD water. Finally, it was Chelan PUD that extended both water and wastewater service into Olds Station that was necessary to support the commercial and industrial development of the area. The overall economic value of Olds Station is well recognized and would not have been realized had Chelan PUD not taken the initiative to install the water and wastewater systems.

Going forward, a significant issue for Chelan PUD’s water system is how we address future resource needs. Chelan PUD is participating in a regional evaluation of options. We are committed to a stakeholder engagement process as the decisions have a significant implication for customer-owners.

## ***Fiber and Telecom***

Chelan PUD operates a Fiber to the Home (FTTH) network using Passive Optical Network (PON) technology. The existing system passes approximately 69 percent of the premises served by Chelan PUD’s primary electrical system in Chelan County. Approximately 42 percent of those who have access to the network take services.

As a Washington public utility district, Chelan PUD is restricted from supplying retail telecommunications services and facilities to end users.

## **Strategic Actions**

- Upgrade from BPON to GPON technology
- Make hardware and software upgrades to improve network performance
- Explore wireless alternatives to fiber for some applications
- Develop a long range technical plan
- Establish a network disaster recovery plan
- Improve coordination between utility maintenance and potential impact on fiber resources
- Plan for a sustainable business model for fiber

Instead, it has a wholesale business model. The broadband system is “open access”—with retail service providers licensing access and transport services from Chelan PUD, then providing retail services to their end-user customers. Currently, nearly 98 percent of existing fiber customers are served by a single retail service provider, even though 10 retail service providers are licensed to provide service over the network. Of these 10, four serve businesses only. As operators of the wholesale system, we stay attuned to the financial health of the retail service providers because it could present a risk to our investment if a major provider went out of business.

The Chelan PUD fiber system has a stable financial outlook from a daily operational perspective. Following a rate adjustment approved by the Board of Commissioners in 2013, rate revenue covers operating expenses. However, the outlook for cash reserves degrades through time as the system utilizes cash to cover its capital requirements and growing maintenance expenses. To maintain a necessary cash balance, capital needs — including any expansion of the system — will have to be addressed through additional rate adjustments, an allocation of public power benefit, or a combination of the two.

Going forward, the Fiber and Telecom Business unit will make strategic investments in the system to enhance customer satisfaction and insure competitive service. Several initiatives have been identified for the next five years, including software and hardware improvements to enable proactive network support to improve both service and reliability; development of a network disaster recovery plan; evaluation of the viability of wireless applications as a fiber alternative; improved management of utility maintenance efforts that impact fiber; development of a fiber sustainability plan; and an upgrade of the system’s current Broadband Passive Optical Network (BPON) technology with the newer Gigabit-capable Passive Optical Network (GPON) technology that will provide faster service (up to 1000 mbps).

Finally, the deployment of the “public power benefit” may also have significant implications for the fiber system. If public power benefit funding is made available for investment in the fiber program, the system could be further expanded. Expansion decisions would be made in accordance with the outcome of the public outreach process and public power benefit funding allocation methodology with a focus on areas that provide greatest financial return while also investing in research for viable, lower cost alternatives to fiber such as wireless technology.

### ***Finance, Risk and IT***

The overall objective of the Finance, Risk and Information Technology (Finance) business unit is to provide financial insight, technical software expertise and in-depth risk assessment that improves Chelan PUD’s operational performance. Chelan PUD has financial policies in place that are keeping this utility on a sustainable path, reducing our debt and improving other key financial metrics evaluated by rating agencies. The Finance business unit is primarily tasked with identifying opportunities, developing solutions and implementing actions that keep us in line with the financial metrics for the long-term.

For example, during the next five years, the Finance business unit will take the lead in implementing our plans for

## **Strategic Actions**

- Financial stability through optimal management of capital assets, cash, investment and debt (enhanced capital allocation decision-making)
- Utilize advanced risk analysis.
- Promote efficiencies through technology (IT investments)
- Vigilance concerning cyber security risks
- Maintain or enhance bond rating

accelerated debt reduction. It will serve the utility by making recommendations about how to optimally manage capital assets, investments and debt. It will be responsible for ensuring Chelan PUD can maintain or even enhance our existing AA bond rating.

At the same time, the Finance business unit will carry out several other initiatives that support better and more efficient decision-making processes. It will utilize advanced risk analysis tools to evaluate risk and develop risk mitigation plans enterprise-wide. Because Chelan PUD's information technology group is housed within the Finance business unit, another strategic initiative is to increase vigilance around cyber security risks, and to promote business efficiencies through investment in information technology.

### *District Services*

The District Services business unit essentially provides functional support to other business units. Departments in this business unit include Natural Resources, Communications, Engineering and Project Management, External Affairs, Facilities, Fleet Services, Office Services, Real Estate Services, Security Division, and Supply Chain. The initiatives of this unit support the success of the other business units and complement high-priority projects across Chelan PUD. During the next five years, District Services engineers and project managers will be supporting the major rehabilitation projects and implementing a seismic evaluation of our hydropower dams.

This year, the Natural Resources department (including fisheries, licensing and compliance, parks and wildlife programs) was brought under the District Services business unit. Our environmental programs, hydropower licenses and parks are particularly important to the public and state and federal policy makers. It made sense to more closely integrate these efforts with External Affairs. These groups will be working closely together to ensure that Chelan PUD's successes with the Rocky Reach and Rock Island Habitat Conservation Plans (HCPs) are fully recognized by emerging regulations. We are committed to funding and implementing the HCPs.

In addition, within the current planning timeframe, Chelan PUD will be preparing to relicense the Rock Island project — even though the existing license does not expire until 2028.

The relicensing process is resource intensive and lengthy — and public policy changes for hydropower licensing or endangered species could affect how we manage the acquisition of a new federal operating license.

Other high-level policy decisions are on the horizon. A priority for District Services will be active engagement on the Columbia River Treaty. Because Chelan PUD pays 11 percent of the Canadian

### **Strategic Actions**

- Support the major rehabilitation projects and implement a seismic evaluation of the dams
- Ensure Habitat Conservation Plans are fully recognized by emerging regulations
- Begin policy-level preparations for Rock Island relicensing
- Actively engage on the Columbia River Treaty to increase hydropower system value for our customer-owners
- Maintain our parks
- Evaluate our facility needs
- Consider vehicle electrification
- Sustain communications and revamp existing website



Entitlement paid under the Treaty, we have a particular interest in seeing the U.S. resolve this issue in favor of Northwest electric ratepayers.

To learn more about public policy issues of particular interest to Chelan PUD, see *Attachment C, Policy Environment*.

Management of Chelan PUD parks also falls under District Services. Chelan PUD strives to ensure that our parks are clean and attractive and provide an excellent experience for users. We recognize that these parks are prized by this community and we want to keep them as an attraction for visitors and as an amenity for residents. Key issues include whether our existing relationship with Washington State Parks should evolve to one where we take better advantage of the core competencies of the two organizations; establishing an operating agreement for the new Entiat Park; and updating the operating agreement for Orondo Park.

During the next five years, Chelan PUD also will conduct an evaluation of our existing facilities, their current condition, and our future needs. This will be a long-term project and encompass headquarters facilities in addition to service and operations buildings. We will be looking for what creates efficiencies and the best long-term value for our customer-owners.

As a result of extensive public outreach through this strategic planning process, we also anticipate that District Services will evaluate the cost-effectiveness of transitioning at least some of Chelan PUD's fleet to electric vehicles.

On the communications side, District Services will be overseeing our effort to sustain a high level of public engagement through redevelopment of Chelan PUD's website.

### ***Legal, Compliance and Audit***

Chelan PUD's Legal, Compliance and Audit (LC&A) group is made of up the three distinct services — the office of the General Counsel; Compliance, and Audit. The office of the General Counsel provides legal advice and counsel to the Board of Commissioners and management to further the best interests of Chelan PUD. The Compliance function is charged with fostering the utility's "culture of compliance" with: (a) laws and regulations; (b) ethics; and (c) internal policies. Finally, Internal Audit provides independent and objective assurances on the utility's financial, operational, risk management, compliance and control activities.

The utility industry is highly regulated at the federal and state level. During the past decade, new laws and regulations have increased the cost and complexity of compliance with our federal hydropower operating licenses, grid reliability requirements, renewable and environmental mandates, health and safety rules, and more. LC&A staff is actively engaged in major initiatives such as the power hedging program, Columbia River Treaty issues, major federal electric grid reliability and cyber security standards, environmental

### **Strategic Actions**

- Provide outstanding and objective legal advice and alternatives to be considered in moving forward with projects and issues
- Facilitate, foster and support a culture of compliance with laws and regulations, ethics and policies
- Promote appropriate governance at all levels
- Provide independent and objective assurances on financial, operational, risk management, compliance and control activities

permitting, and development of an energy imbalance market in the west. LC&A staff provides these services directly to Chelan PUD to the extent possible, but also recommends when outside expertise is necessary.

The most significant challenge for the LC&A group is keeping pace with a rapidly changing risk and compliance environment. During the next five years, the LC&A group will be managing some retirements of existing staff and implementing a succession management program to ensure that Chelan PUD maintains an appropriate level of internal expertise for the growing workload.

### ***Human Resources and Safety***

The Human Resources and Safety business unit (HR/Safety) serves Chelan PUD by leading talent management processes and promoting a safe and healthy workforce. The business unit is responsible for policies and programs covering all aspects of employment, learning and development, safety, health and welfare. Currently, multiple challenges are increasing pressures on Chelan PUD's workforce outlook. Staffing needs are increasing as we reinvest in the utility, improve performance and customer-owner satisfaction, and respond to increasingly complex regulatory requirements. At the same time, demographic shifts are reducing the available talent pool.

Chelan PUD is similar to other utilities across the nation: our workforce is aging. During the next five to 10 years, we will experience a wave of retirements and face a loss of key knowledge and skills. The HR/Safety business unit is working with Chelan PUD managers to identify at-risk knowledge and skills and plan for how to develop talent internally and/or attract new talent. In addition, investment in employee training is needed to achieve net revenue, customer satisfaction, and compliance goals.

The HR/Safety business unit is also responsible for employee training, performance management and recognition programs. To meet Chelan PUD's business needs, the HR/Safety business unit is enhancing training offerings that align with our District Values and ensure employees are improving their skills, with each employee working with management to identify relevant individual development goals. Customer service training, with a focus on customer satisfaction, has been identified as a priority. The business unit will also lead an effort to retool existing programs more meaningfully to recognize excellent employee performance.

In addition, evolving employment law and regulations require additional staff time and increased costs associated with compliance and potentially for non-compliance. It will be important for supervisors and HR/Safety business unit staff to be continuously trained on employment law updates.

Chelan PUD is making efforts to reach out through career fairs and a partnership with community leaders representing

### **Strategic Actions**

- Implement the Safety strategic plan
- Target hiring to meet strategic business needs
- Negotiate and implement a Collective Bargaining Agreement
- Implement Affordable Care Act strategies
- Implement a Leadership Development Program focusing on leadership, safety, ownership/ accountability, customer satisfaction, and change management
- Promote a culture of strong performance, accountability, and continuous improvement
- Implement training programs for customer service and programs to improve current employee skills based on business needs

diverse populations to ensure that our workforce more closely resembles the community. The demographics of the community are changing more rapidly than the turnover rate of Chelan PUD staff. This strong employee retention is positive for performance, but makes it difficult to reflect the changing demographics of the community.

Providing appropriate and competitive health and welfare benefits is a core function of the HR/Safety business unit. Chelan PUD is a self-insured entity, and we are concerned that medical costs will not be affordable for Chelan PUD and our employees. The health care inflation trend has been significantly greater than the general inflation trend for many years. The HR/Safety business unit is working to find a solution to implementing the requirements of the Affordable Care Act in a way that is financially sustainable for Chelan PUD and its employees.

In addition to providing for the health and welfare of employees, the HR/Safety business unit is responsible for the safety of employees and the public. From a safety perspective, Chelan PUD has worked hard to promote a culture of safety. We consider our status to be “good” and continue to strive to bring it to “great” by implementing robust safety metrics and a safety leadership program.

The HR/Safety business unit is helping with an initiative to take personal performance to new levels in all functional areas. This initiative is the “cycle of personal ownership” and is intended to help each employee take personal responsibility for their role in making Chelan PUD successful. Under this initiative, supervisors and staff will work to improve accountability by more clearly delegating roles, responsibilities and project timelines. Individuals will be empowered to make decisions and take appropriate risks when acting within established policies, procedures and other guidelines. We also will enhance efforts to always use “lessons learned” to identify how we can improve. In order to serve our customer-owners better, we need employees who act within appropriate boundaries and are accountable for the work they perform.

Finally, the HR/Safety business unit will support an effort to establish key decision criteria that can be used to address any issue where decisions need to be made. The goal is to establish decision-making criteria from a holistic perspective considering what the Board of Commissioners or the General Manager would need to know in order to make a high-quality decision. We expect to be able to use these criteria in a manner that would allow decisions that are rigorously but relatively quickly evaluated. Because the criteria used will be better understood by all employees, they will ultimately allow for more delegation within defined sideboards. The HR/Safety business unit will provide training for the use of such decision criteria.



## Cycle of Personal Ownership

### Responsibility

“Before” phase. Define the task and take ownership of it.

### Empowerment

“During” phase. Decide the steps, ask for assistance, overcome barriers, and stay on track.

### Accountability

“After” phase. Be willing to answer for the results, celebrate success and share lessons learned.

## *Conclusion*

In accordance with this strategic plan, we will diligently preserve and enhance the value of the assets that produce financial value for our customer-owners. By rehabilitating and reinvesting in the hydropower assets and promoting wholesale power sales, we can return significant value to local residents in the form of low rates, other utility services and even a “public power benefit.” To achieve these goals, we must appropriately engage in public policy issues that could impact the operational flexibility or marketability of our assets. Our business unit plans demonstrate how we are working on many fronts to optimize value for our customer-owners.

During the past year, community and Topic Team leaders and the public have invested a lot of time and energy in our strategic planning effort, and we thank you. We knew that our customer-owners would have a particular interest in the possibility that we could return a “public power benefit” in years where there is available revenue. Whether you attended meetings, contributed comments, or answered our survey — we appreciate your individual contribution. This is an exciting time, and we hope it reminds our customer-owners of the sense of pride and opportunity that surrounded the original creation of Chelan PUD.

As we implement this strategic plan, we would like to maintain the conversation we began through the strategic plan outreach effort. More work will need to be done as decisions are made. We will be developing metrics to measure our progress as we implement this plan. We may call upon the Strategy Partners to meet on an annual basis for a “check-in” as we measure ourselves against the goals of this strategic plan. And, while new members may need to be recruited to the Topic Teams because of the significant commitment of time and energy, we look forward to keeping advisory groups engaged as public power benefit decisions are implemented. We also commit to providing avenues for continued customer-owner involvement as we move forward. Please never hesitate to communicate with us if you have questions or concerns.



The purpose of this summary is to provide a relative magnitude of expenditures by year to aid in choosing between public power benefit options. These are high level estimates for strategic planning purposes only. Actual costs and timelines will vary as feasibility studies, business cases, engineering and design efforts are completed. Actual costs and timelines would also change if underlying assumptions change.

Topic Team	#	Option	Initial Estimate \$	2015		2016		2017		2018		2019		Comments
				Add'l Budget \$	Add'l FTE's	Add'l Budget \$	Add'l FTE's	Add'l Budget \$	Add'l FTE's	Add'l Budget \$	Add'l FTE's	Add'l Budget \$	Add'l FTE's	
Parks	1	<b>Expand or add amenities in existing parks</b>	<b>\$10M-\$18M over 20 years</b>											
Parks		-Top Priority: Horan Natural Area	200,000	Feasibility study		Permitting		Permitting		200,000				
Parks		-Top Priority: RR Aquarium	1,500,000	0 (\$15k already in budget)		1,500,000	1 Student Intern							
Parks		-Top Priority: Amphitheaters	100,000 - 500,000	Feasibility study		100,000 - 500,000 through 2018	2 Seasonal/1 FTE	100,000 - 500,000 through 2018		100,000 - 500,000 through 2018				
Parks		-Top Priority: Splash pad	150,000 - 300,000	Feasibility, Design & permitting		75,000-150,000	1 FTE per-unit	75,000-150,000						
Parks		-Optional (beyond Topic Team cost estimate of \$10M-\$18M): WiFi in parks	unknown	Feasibility study		TBD	1 FTE							
Parks		-Optional (beyond Topic Team cost estimate of \$10M-\$18M): Exercise equipment	100,000 - 500,000	Feasibility study		50,000-250,000	1 Seasonal per-park	50,000-250,000						
Parks		-Optional (beyond Topic Team cost estimate of \$10M-\$18M): Dugout upgrades at WW and KB	250,000 - 350,000 potential cost-share	250,000 - 350,000										
Parks	2	<b>Bring more activities and programs to parks</b>	<b>\$2M-\$4M over 20 years</b>											
Parks		-Wenatchee Row and Paddle Club facilities	\$1M - \$3M potential cost share	Feasibility study		Design/permitting		Design/permitting		\$1M - \$3M				
Parks		-Hire an employee to focus on activities and programming in parks	\$100,000 annually	\$50,000 contractor pilot		100,000	1	100,000		100,000		100,000		
Parks	3	<b>Waive day use fees at PUD parks for residents</b>	<b>\$5M-\$10M over 20 years</b>	125,000-250,000 Pilot at Confluence	possible add'l seasonal hires	250,000-500,000 all parks	*	250,000-500,000 all parks		250,000-500,000 all parks		250,000-500,000 all parks		
		Day use fee budget influenced by # of parks in pilot and/or other means to make operating partners whole; i.e. day-use maintenance tasks				* Staffing dependent upon agreement with State Parks: 0-13 seasonals								
Water & WW	1	<b>Sustain existing water and wastewater services</b>	<b>\$10M-\$20M over 20 years</b>											
Water & WW		-Fund Water systems shared assets, mandated relocation projects and/or proactive replacements of water mains in leak prone areas		\$50,000-100,000		\$50,000-400,000		\$50,000-390,000		\$50,000-380,000		\$50,000-400,000		Amount dependent on internal shared asset plans, mandated County and City road plans, and leak identification
Water & WW		-Fund Wastewater system operating shortfalls and/or future regulatory/mandated capital work, range assumes varying levels of customer contribution through rate adjustments		\$ 75,000		\$75,000-225,000		\$150,000-400,000		\$150,000-400,000		\$150,000-400,000		Depending on level of support, a capital/debt service rate adder (estimated at \$15/ERU/month Lake Wenatchee and \$40/ERU/mo. Peshastin & Dryden) or a rate adjustment plan of at least 5% per year for 5 years may be required
Water & WW	2	<b>Expand services to promote prudent growth planning</b>	<b>\$20M-\$50M over 20 years</b>	\$30,000 legal fees to explore PUD authority		TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	
Water & WW	3	<b>Transfer services to other entities to enable regionalization</b>	<b>\$10M-\$20M over 20 years</b>	\$50,000 comp study (\$50K in budget for City of Wen study)		TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	
Water & WW	4	<b>Fund improvement for surface water quality</b>	<b>\$5M-\$10M over 20 years</b>	\$10,000 legal fees to explore PUD authority		TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	
Water & WW	5	<b>Lend money for water and wastewater infrastructure</b>	<b>\$10M-\$100M over 20 years</b>	\$10,000 legal fees to explore PUD authority		TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	
Fiber	1	<b>Maintain the fiber program as is, at 69% build-out</b>	<b>\$3M-\$5M over 20 years</b>											
Fiber	2	<b>Expand the fiber system to 85-90% of electric customers</b>	<b>\$25M over 20 years</b>	\$1M-\$1.2M (30 week materials lead time after complete prelim engineering)	7 1 2Q15 for Eng. & Work Orders 6.4Q15 for 2016	\$1.5-2.5M		\$1.5-2.5M	1-2 based on level of buildout	\$2.5-3.5M	1-2 based on level of buildout	\$2.5-3.5M	1-2 based on level of buildout	
Fiber		-Fund shared assets for fiber with public power benefit (part of sustainability plan)		\$ 240,000.00		\$ 420,000		\$ 360,000		\$ 310,000		\$ 400,000		
Fiber	3	<b>Build out the fiber system to all electric customers</b>	<b>\$63M over 20 years</b>											

Chelan County PUD  
 2015-2019 Strategic Planning - High Level Estimate of Annual Costs for Each Topic Team Option  
 Prepared 1/29/15

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Topic Team	#	Option	Initial Estimate \$	2015		2016		2017		2018		2019		Comments
				Add'l Budget \$	Add'l FTE's	Add'l Budget \$	Add'l FTE's	Add'l Budget \$	Add'l FTE's	Add'l Budget \$	Add'l FTE's	Add'l Budget \$	Add'l FTE's	
Electrification	1	<b>Lead in the transition to electric vehicles and equipment</b>	<b>\$5.5M over 20 years</b>											
Electrification		-Appoint a Project Manager and Executive Sponsor to oversee activities	Part-time position: \$1.5 M over 20 years	\$75,000 (\$100 k salary + benefits)	0.5 FTE	\$ 75,000		\$ 75,000		\$ 75,000		\$ 75,000		
Electrification		-Convert fleet from fossil fuel to electric (cars, chargers, off-road equip, training)	\$4M over 20 years	\$ 200,000		\$ 200,000		\$ 200,000		\$ 200,000		\$ 200,000		
Electrification		-Install vehicle chargers at PUD facilities (9 Level 2 chargers-satellites & 5 @ HQ)	\$ 45,000.00	\$ 45,000										
Electrification	2	<b>Get involved in electrification research and education</b>	<b>\$2M over 20 years</b>	\$ 100,000		\$ 100,000		100,000		100,000		100,000		
Economic Development	1	<b>Use surplus power to attract industries and jobs</b>	<b>Up to \$100M over 20 years</b>	\$75,000 (\$100 k salary + benefits)	0.5 FTE	75,000		75,000		75,000		75,000		
Economic Development		-Develop Allocating Power for Jobs Tool	\$250,000	\$ 250,000										10 aMW for 15 years = \$40M
Economic Development	2	<b>Provide student mentoring and education opportunities</b>	<b>\$4M over 20 years</b>											
Economic Development		-Mentoring (30 staff at \$80k/year, 1 hour per week during school year)	\$1.5M over 20 years	\$62,000 (\$80k salary + benefits for 9	0.5 FTE	\$62,000		\$62,000		\$62,000		\$62,000		
Economic Development		-Higher Ed Curriculum (20 staff, 3 hours per week during school year)	\$2.5M over 20 years	124,000 (\$80k salary + benefits for 9	1.0 FTE	\$124,000		\$124,000		\$124,000		\$124,000		
Economic Development	3	<b>Take an active, proactive role in economic development</b>	<b>\$4M over 20 years</b>	\$ 200,000		\$ 200,000		\$ 200,000		\$ 200,000		\$ 200,000		Fund R&D projects at \$200k per year
Reinvestment		Note: These cost estimates are provided for informational purposes. Reinvesting in our assets is part of our normal operating expenditures and not a use of public power benefit. These expenditures do have an impact; however, as they would be a factor in determining the amount of funds available for public power benefits.												
Reinvestment	1	Protect transmission structures against storms and fire	\$50M over 5 years	0		\$200k Feasibility	FTE or consultant	Permitting		To be determined from feasibility/business case (including need for additional FTE's)				
Reinvestment	2	Develop partnership plan to consider underground distribution lines	\$100M shared over 20 yrs	0		\$100k policy development	FTE or consultant	To be determined from policy/business case						
Reinvestment	3	Consolidate industrial facilities outside downtown	Feasibility study			To be determine by feasibility/business case-rough estimate approximates \$10M over 5 years								
Reinvestment	4	Renovate/build new headquarters building	Feasibility study			To be determine by feasibility/business case-rough estimate approximates \$50M over 10 years								
Reinvestment	5	Create a workforce skills development program for potential applicants	<\$1M over 5 yrs	None over existing budget \$15k for engineering with WSU		\$50k	FTE or consultant	Requires more analysis/planning including need for additional FTE's (initial estimate ~ 0.4 FTE annually)				Hiring temp workers for OJT experience, creating dedicated classroom environment (computers, software, etc.) outreach, marketing, etc.		
Reinvestment	6	Create a Chelan PUD volunteer corps	<\$250,000 over 20 yrs	Minimal - primarily coordination efforts for 0.1 FTE. Volunteer activities would take place during non-business hours								Costs would be staff coordinating time and potentially small things like logowear for participants. Small pilot for Make A Difference day planned in 2015. Probably		
Reinvestment	7	Accelerate Rock Island rehabilitations (potentially 5 years earlier than planned)	\$55M PH1: 2015-2020 \$200M PH2 in 2020/21+	\$6M in budget		\$21M in forecast		\$17M in forecast		\$24M in forecast		\$21M in forecast		\$12M in 2020 forecast for B8, \$47M-\$55M per year 2021-2028 in forecast, for PH2 pending business case approval
Reinvestment	8	Replace aging distribution assets and further protect against storms and fire	\$100M over 10 yrs	0		\$200k to establish new program	FTE or consultant	To be determined from new program/business case including need for additional FTE's						
Reinvestment	9	Proceed with lower-return distribution system improvements to reduce costs	\$50M over 10yrs	0		0		\$200k to establish new program	FTE or consultant	To be determined from new program/business case including need for additional FTE's				
Reinvestment	10	Create new development programs for PUD employees	<\$1M over 20 yrs	None over existing \$175k budget		\$175k in forecast		Requires more analysis/planning including need for additional FTE's (initial FTE est. ~0.5 HR + 0.5 Depts)				2015 includes leadership development series		
Reinvestment	11	Implement an employee wellness program	<\$250,000 over 20 yrs	None over existing budget \$50k	0.05 Hr	\$50k-\$75k	0.05 Hr	Requires more analysis/planning including need for additional FTE's (initial FTE est. ~1.0 to administer and 0.1 Depts. for steering committee)				Costs may exceed \$250k over startup period (3-7 years) before intended benefit is realized by controlling employee healthcare		

- Notes:
- 1 - Strategically reinvesting in essential assets is the top priority that must necessarily be addressed before funds are considered as available for optional investments
  - 2 - All 11 Options are subject to business case analysis – if pass, would be prioritized through planning processes
  - 3 - While essential reinvestment takes precedence over optional investments, choices exist for how much to reinvest in which areas
  - 4 - Asked the public to further weigh in on Options 1-6

# Attachment B

Draft examples - for strategic planning discussion purposes only

Example of Public Power Benefit "uses" using Board Guidance from the 2/17/15 Board meeting:

1 - Board utilized the public input from the Owners Guide to help select options

2 - Selected option impacts are calculated depending on expenditure type:

- 1- One time capital or O&M outlay - amount of impact
- 2- One time capital outlay with ongoing O&M cost - NPV of net cost/revenue stream over asset life
- 3- Multi-year capital outlay (no O&M cost) - Commit to program, but not pace to be accomplished, annual decision for amount of impact
- 4- Multi-year capital outlay and/or ongoing O&M cost - Commit to program, but not pace to be accomplished, annual decision for NPV of net cost/revenue stream over life of annual added asset

Note: The goal is to set the initial PPB at a level that allows us to pilot the program and gain experience. It is intended that the program considerations and methods will be modified in the future as the program matures (crawl)

Topic Team	Option	Expenditure Type	(amounts in thousands)			Add'l FTE's
			2015	2016	Total 2015-2016	
Parks	Horan Natural Area Feasibility Study	One Time O&M for Study	\$ 50	?	\$ 50	?
	Splash Pad Feasibility Study	One Time O&M for Study	\$ 150	?	\$ 150	1.0
	Pilot Study to Waive or reduce Day Use Fees	Multi-Year Program (Ongoing O&M) <i>(assumed 2 year commitment)</i>	\$ 250	\$ 250	\$ 500	?
Water/Wastewater	Fund Water System Initial funding from 2008 CRC Funds	Multi-year capital outlay Adopt Philosophy	\$ -	\$ -	\$ -	-
	Fund Wastewater System Initial funding from 2008 CRC Funds	Multi-year capital outlay Adopt Philosophy	\$ -	\$ -	\$ -	-
	Expand Services to Promote Prudent Growth <i>(legal review only to explore authority)</i>	One Time O&M for Study	\$ 30	?	\$ 30	?
	Study Water/WW Operations with City of Wenatchee <i>(evaluate opportunities for operational efficiencies between entities)</i>	One Time O&M for Study	\$ 50	?	\$ 50	?
	Fund Improvements for Surface Water Quality <i>(legal review only to explore PUD authority)</i>	One Time O&M for Study	\$ 10	?	\$ 10	?
Fiber	Expand Fiber System <i>(Estimated range \$1.5M-\$2.5M/year)</i>	Commit to Program Annual Decision on Pace	\$ 1,200	\$ 2,500	\$ 3,700	7.0
	Fund Fiber System Initial funding from 2008 CRC Funds	Multi-year capital outlay Adopt Philosophy	\$ -	\$ -	\$ -	-
Electrification	PUD Facility Charging Stations	One Time Capital Outlay	\$ 45	\$ -	\$ 45	-
Economic Development	Economic Analysis Tool <i>(Tool to Evaluate Net Impact of New Electric Loads)</i>	One Time Capital for Tool	\$ 250	?	\$ 250	0.5
	Provide Electric Infrastructure For Economic Development <i>(study to determine future options)</i>	One Time O&M for Study	\$ 200	?	\$ 200	0.5
	Increase Utility-focused Education Programs <i>(for econ develop., electrification, environment, retaining local youth, etc)</i>	Ongoing O&M Cost <i>(assumed 2 year commitment)</i>	\$ 100	\$ 100	\$ 200	1.5
<b>Total of PPB Options</b>			\$ 2,335	\$ 2,850	\$ 5,185	10.5
<b>PPB Amount</b>			\$ 4,500	\$ 3,500	\$ 8,000	
<b>Remaining/(Overcommitted)</b>			\$ 2,165	\$ 650	\$ 2,815	

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## Attachment C — Policy Environment

Public policy at the state and national levels will continue to present challenges and opportunities for Chelan PUD. Our business model and operations can be affected by legislative or regulatory changes in energy and transmission policy, environmental requirements, financial and health care markets, cyber security rules and telecommunications law — just to name a few. In this Strategic Plan, we would like to share our views on greenhouse gas reduction — an overarching issue that is shaping public policy debate — along with several other issues that directly impact Chelan PUD and our customer-owners.

- **Greenhouse Gas Emissions**

Electric utilities produce roughly one-third of the nation’s greenhouse gases (GHGs). As a result, many national and state initiatives are focused on reducing GHG emissions from the electric sector (though they may have other objectives as well, such as promoting new renewable resources). At the national level, the Environmental Protection Agency’s proposed “Clean Power Plan” sets state-based carbon reduction targets for existing power plants. Federal tax incentive policy also supports production from wind and other low-emission resources. In Washington State, the 2006 Energy Independence Act (I-937) set requirements for certain utilities to buy renewable power — also influencing the emission-profile of electric utilities.

Chelan PUD believes it is important to pursue both environmental and economic health. Our goal is to maintain our low-cost electric supply while also seeking effective, “least-cost” strategies for achieving environmental objectives.

To do this, supply curves for carbon emission reduction at the national and state level should be established through rigorous analysis. Economists call such supply curves “marginal abatement curves.” These curves would illuminate the lower cost alternatives for reducing GHG emissions and allow investment first in the least expensive compliance options. Taking this approach would help compliance be more affordable for electric consumers and defer mandated utilization of more expensive technologies until they become more affordable over time.

For Chelan PUD, the least-cost options for supporting potential state and federal greenhouse gas reduction goals are optimizing hydropower production and aggressively pursuing energy efficiency. These options keep GHG emissions low in Chelan County and across the west, since Chelan PUD markets surplus hydropower to other Northwest utilities. Our hydropower generation helps position Washington State as one of the least carbon-intensive states in the nation. Effectively, these options have zero cost or even provide a benefit to our customer-owners because the wholesale market value of selling surplus power equals or exceeds the cost of producing the power. Incidentally, there may also be opportunities for electrifying Chelan PUD vehicles that would have little or no net cost to Chelan PUD — though more evaluation is needed in this area.

On the other hand, evidence suggests that wind and solar resources are at the higher end of the supply curve — meaning they are more expensive compliance options. A report<sup>1</sup> by the Pacific Northwest Utilities Conference Committee (PNUCC) points out that buying wind power to avoid GHG emissions cost two Northwest investor-owned utilities between \$160 and \$200 a metric ton.

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1. *Carbon Emissions – a Northwest Perspective, PNUCC. July, 2014*

A 2014 study<sup>2</sup> performed for the five largest California utilities suggests that moving toward a 40 or 50 percent renewable portfolio standard (RPS) would cost roughly \$340 a ton for a 40 percent RPS scenario, and as much as \$637 a ton under a 50 percent RPS scenario that predicted an influx of large, utility-scale solar. These costs can be compared against the current market price in California of less than \$15 per ton for a carbon emission allowance.

Some evidence suggests that placing a price on carbon (through a tax or a cap/trade mechanism) can result in the least-cost, most economically efficient means to accomplish emissions reductions. Chelan PUD's hydropower resources would likely become more valuable if a price is placed on carbon. The open question, however, is how lawmakers will use the revenues generated from either a carbon tax or from the sale of carbon allowances (i.e. the right to emit). This is critical to the determination as to whether the people of Chelan County will be better or worse off economically as a result of a carbon price.

What does all this mean for Chelan PUD? We have work to do with policy makers to ensure that hydropower is recognized as part of the solution. Because hydropower is a mature resource, it is sometimes overlooked or treated differently in policies intended to spur renewable energy generation or cut carbon emissions. We continue to work hard to promote hydropower's role as the premier renewable resource that is low-cost, emission-free, and capable of providing baseload capacity, load following and regulation to the electric grid. Our message is that public policy should serve to keep existing hydropower online and encourage its growth.

We intend to meet our obligation to serve in the most cost-effective manner that also considers societal preferences. Where it makes sense, we will purchase resources such as energy efficiency when it is below the wholesale power market price. However, we have no plans to acquire generation resources such as wind and solar that are above the wholesale market price and at the high end of the cost curve for GHG emission reductions.

We will, however, continue to support programs which enable customers who want to willingly make voluntary funding commitments to support the installation of solar and wind resources.

- **Climate Adaptation**

Most Northwest utilities are beginning to evaluate how changing levels of precipitation may affect water availability and runoff timing. Scientists studying the potential impacts of climate change in the Columbia River Basin suggest little relative change in the overall level of precipitation, but more precipitation falling as rain, reducing the amount of water that the Pacific Northwest stores naturally in mountain snow. Higher temperatures could also result in higher winter streamflows, earlier spring snowmelt, earlier peak spring streamflow, and lower summer streamflows. From a water resource perspective, this could prompt a need for additional water storage infrastructure, along with increased reliance on existing storage projects such as Grand Coulee Dam. It would suggest a need to consider changes to operations and marketing strategies.

For fish, higher temperatures could affect fish migration and lead to higher river temperatures. This could have significant impacts on salmonids that need cold water to survive. Given the investment Chelan PUD customer-owners have made in salmon restoration, Chelan PUD intends to work with fishery managers to define adaptive management strategies for responding to potential climate change.

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2. *Investigating a Higher Renewables Portfolio Standard in California, Energy+Environmental Economics. January, 2014.*

- **Fish**

For hydropower generators, protecting fisheries is generally the most significant environmental challenge. Chelan PUD customer-owners are the beneficiaries of a far-sighted plan to achieve “no-net-impact” to threatened and endangered species impacted by hydropower operations. Our Habitat Conservation Plan (HCP) for salmon and steelhead commits Chelan PUD to a biological performance standard. We must ensure a high level of fish survival and mitigate with hatchery production and habitat protection to offset all impacts of dam operations. “No-net-impact” is a high standard, but the HCP allows Chelan PUD considerable flexibility to meet the standard using methods that are most effective for our projects. Rather than regulatory prescriptions, we can utilize our knowledge of the dams and the river to target our environmental investments. So far, Chelan PUD has been successful in achieving our performance standards.

Maintaining the “no-net-impact” standard is a key objective for Chelan PUD. Going forward, we will be closely monitoring federal regulatory changes that could have implications for our HCPs. On behalf of our customer-owners, we intend to receive full credit and regulatory surety for the investments we have made — and continue to make — in HCP success. One species that is not covered by the HCP is Pacific lamprey. Our federal operating license for Rocky Reach directs us to conduct studies and develop a plan for juvenile and adult passage of lamprey. These studies are nearly complete, and Chelan PUD will begin developing a plan for lamprey in 2015.

- **Columbia River Treaty**

Under the fifty-year-old Columbia River Treaty, the U.S. pays Canada for the increased power and flood control capability that resulted from the construction of Canadian storage projects. An important date passed in September 2014, after which either country has the ability to give the other 10-years notice that it intends to terminate or renegotiate the Treaty. In a Regional Recommendation to the U.S. State Department, the Bonneville Power Administration and the U.S. Army Corps of Engineers stated that the U.S. should seek to rebalance the so-called Canadian Entitlement because the U.S. is paying too much for the benefits it receives. So far, the State Department has not decided whether to initiate talks with Canada.

Chelan PUD supported the Regional Recommendation, even though many details need further refinement. Like the Bonneville Power Administration and the U.S. Army Corps of Engineers, we believe that the United States is substantially over-paying Canada for downstream power benefits under the current Treaty. As the utility paying the single largest share of the Treaty power benefits to Canada (11 percent of the total Canadian Entitlement) we strongly urge the U.S. government to promptly seek changes to the current payment methodology. We also believe the Treaty needs to address payment to Canada for flood control benefits that should be paid by the U.S. taxpayer — rather than Northwest electric ratepayers — similar to how flood control is compensated in other parts of the country.

Opening Treaty negotiations would also prompt discussions on other issues, including ecosystem function. We support the Regional Recommendation and agree that the Treaty needs to be modernized to consider issues such as cross-border flows. However, we have serious reservations about proposals to achieve fish passage at Grand Coulee and Chief Joseph. These large, upstream federal facilities provide critical river storage and regulation services through the U.S. hydropower system. Fish passage past these facilities is difficult due to the height of the dams and the length of their reservoirs. We are concerned about the potential cost and operation impacts of changing

upstream reservoir operations in pursuit of fish passage. In fact, it is possible that the costs of such a program could override the possible benefits of a reduction in the U.S. Canadian Entitlement payment.

Overall, Chelan PUD hopes to see a suite of changes to the Treaty that provide a substantial net benefit to U.S. electric ratepayers. With much at stake for our customer-owners, we are actively monitoring this issue and joining with other electric utilities to communicate with Congress and this Administration.

We believe that the U.S. government will need to propose terminating provisions related to the Canadian Entitlement return, consistent with the protocol called for in the Treaty, in order to achieve a fair balancing of benefits.

#### • **Wholesale Electric Market Development**

With nearly 80 percent of our revenue dependent upon wholesale electricity sales, the formation of market structures has a significant impact on our financial future. The biggest issue in the Pacific Northwest currently is whether to form an Energy Imbalance Market (EIM) that would address sales within the hour (currently sales are primarily on the hour). This evolution helps address the increasing installation of variable energy resources such as wind and solar. Our position is that five elements are necessary to determine whether an EIM is in the best interests of our customer-owners:

- A cost-benefit analysis that is at least neutral;
- No greater Federal Energy Regulatory Commission (FERC) jurisdiction than currently exists;
- A governance structure that provides for appropriate input from public power;
- Enforceable metrics to ensure there will be adequate generating capacity to assure reliable and price stable operation (resource sufficiency);
- Commitments that traditional hydropower operations will not be defined as attempts to manipulate markets.

Beyond this issue, there are many other market formation discussions that could significantly impact Chelan PUD. These include national discussions at the FERC around transmission planning, reliability, and market based pricing.

Similar issues have arisen in the western markets, particularly with the California Independent System Operator. In recent years, the formation of a greenhouse gas emissions market in California has had significant impacts on electricity markets. We see the need for Chelan PUD to have an increased presence in these forums for two reasons: to protect the interests of our customer-owners, and to assure the best possible public policy outcome by offering our input as a utility managing important assets in the western electric grid. We have committed to increasing the depth of our understanding of, and participation in, the regulatory and legislative forums that influence market development.



- **How Chelan PUD will engage in public policy issues**

There are a many public policy issues (including and beyond those identified above) that have relevance to Chelan PUD’s customer-owners. In order to maximize our opportunities for influence, we participate in organizations where we are likely to create alliances that can increase the weight of our voice or decrease the cost of gathering information.

For this reason, we choose to be members of national and regional organizations that align around public power, hydropower, and energy efficiency concerns. We view these organizations as important elements of our overall strategy that deserve our financial support and our commitment to engagement — and sometimes leadership — in order to effectively function. With our substantial asset base, we expect to be identified as national and regional “thought leaders” in areas key to the success of our organization.

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## CHELAN COUNTY

### Vision

To be valued as an innovative, trusted and highly respected public utility for generations to come.

### Mission

To provide sustainable, reliable utility services that enhance the quality of life in Chelan County.

### Our Values

**Safety • Stewardship  
Trustworthiness  
Operational Excellence**

Invest to create long term value for customer-owners

Commit to the highest level of customer-owner satisfaction

Protect and enhance natural resources impacted by operations

Ensure financial stability

Make continuous improvements in efficient, effective, compliant and risk-assessed operations

Enhance the capability of Chelan PUD staff

Make our values the focus of relationships with customers, stakeholders and each other