ECOSYSTEM MARKETS

What exactly are we talking about in the Yakima River basin!?

Yakima Basin Clean Water Partnership

PROVIDING ECOSYSTEM SERVICES

<u>Directive</u>

<u>Free Market</u>
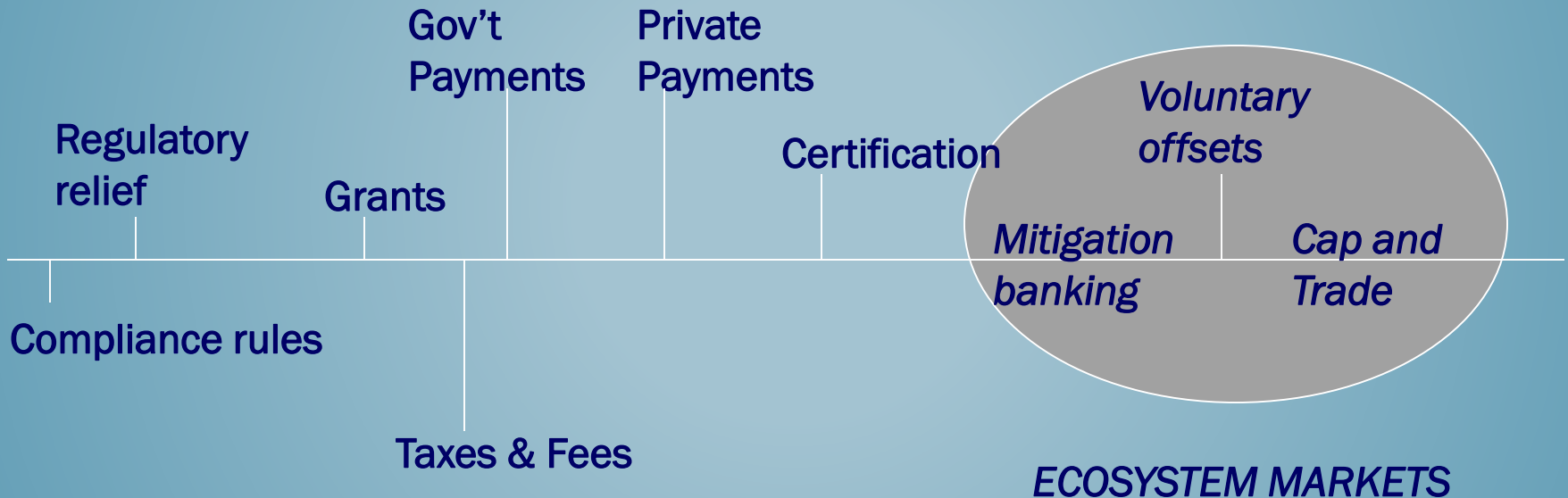
Gov't Payments

Private Payments

Regulatory relief

Grants

Certification

Voluntary offsets

Mitigation banking

Cap and Trade

Compliance rules

Taxes & Fees

ECOSYSTEM MARKETS

GUIDE TO CREDIT CREATION & PURCHASE

1	**2**	**3**	**4**	**5**	**6**
Validate	**Calculate**	**Verify**	**Register & Issue**	**Sell/Trade**	**Track**

- **Validator**

VALIDATOR

- **Validator** is responsible to identify potential and appropriate buyers, sellers, and projects that can participate in a market.

- **Validator** must be a non stakeholder that can work effectively with all market participants.

- **Validator** must have capacity to manage multiple facets of market process.

VALIDATOR

Who?

- **South Central Washington RC&D Council**

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- **Implement Project**

- **Credit calculation**

SELLER

- **Seller** is a completely voluntary landowner whose land has the potential for restoration of ecosystem services.
- **Seller** must be offered adequate incentive through a market to set aside land for restoration and long term conservation.
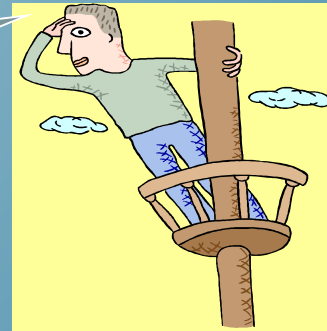- **Seller** may chose to work through a **Seller's Agent** to find buyers for credits.
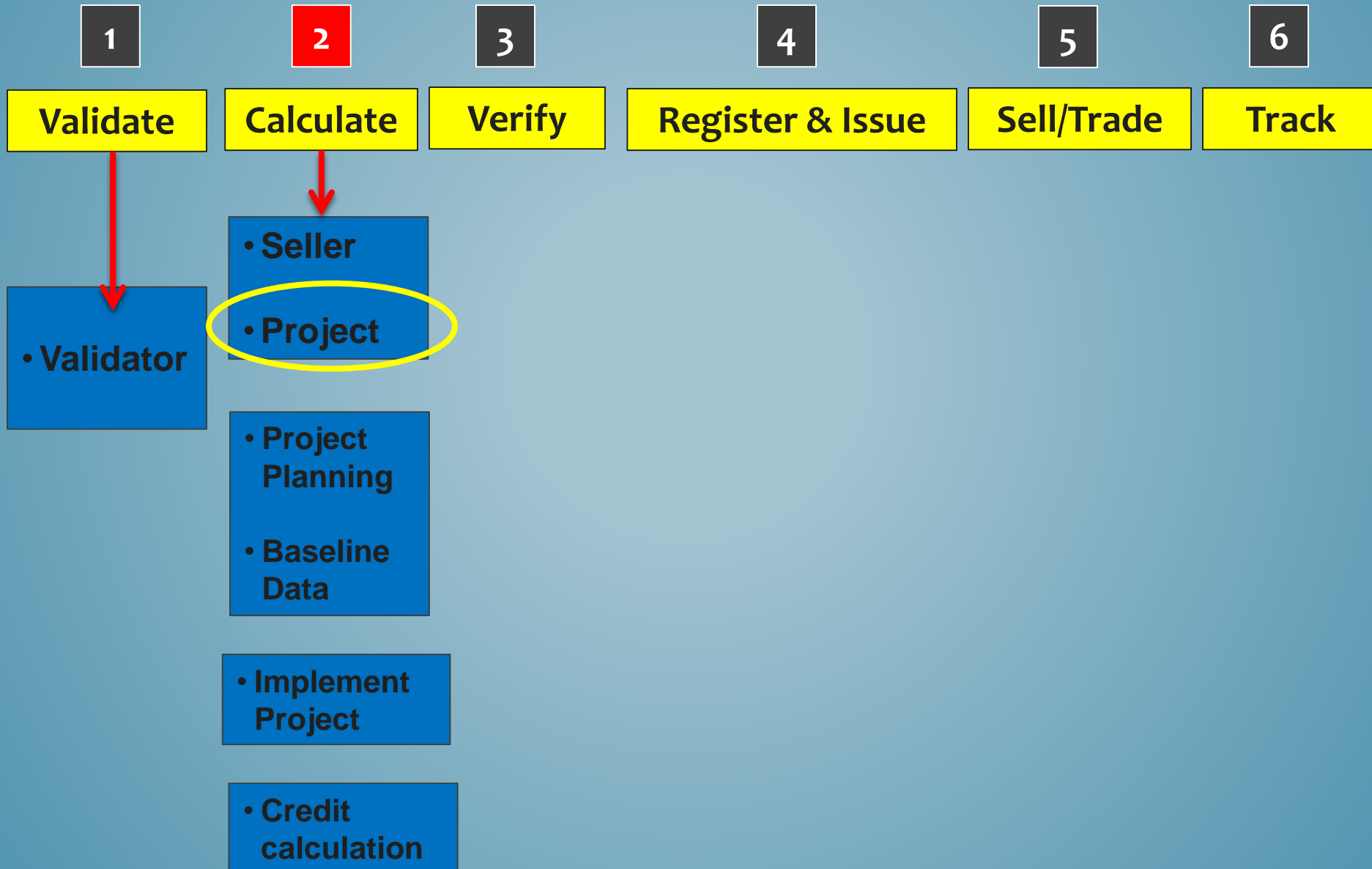
SELLER'S AGENT

- **Seller's Agent** works with multiple sellers, and can aggregate credits.

- **Seller's Agent** must have capital to finance projects upfront and be able to take on necessary risk if project fails.

- Potential **Seller's Agents**:
  - Outside Yakima Basin: The Freshwater Trust
  - Inside Yakima Basin? Groups that already help finance restoration such as fish recovery and habitat restoration non profits.

Where can I sell credits?

Seller's agent
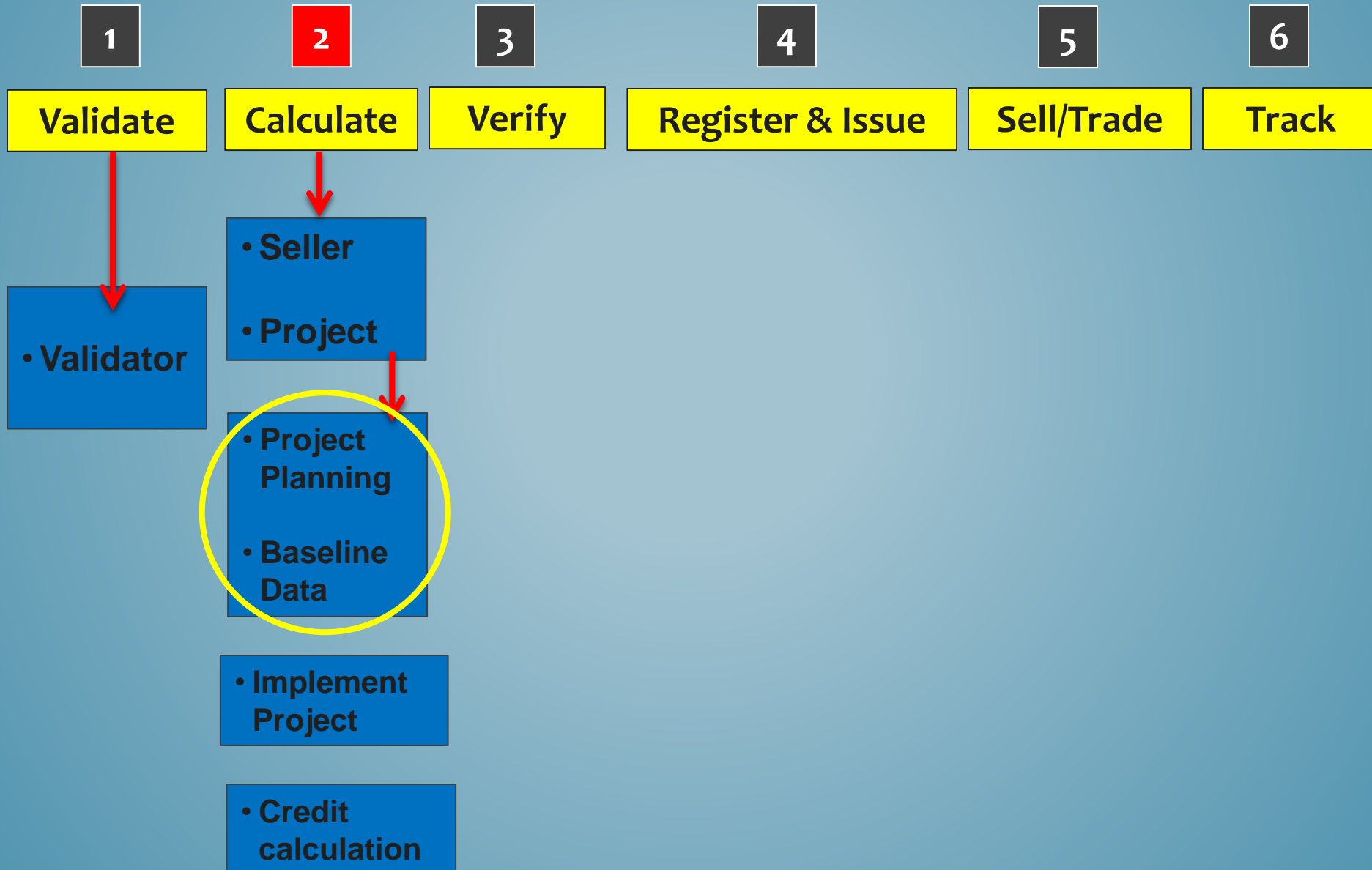
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PROJECT

Project Area: Acreage where credits can be developed and meets the following criteria:

- **Project must be feasible.**
    - Appropriate site selection.
    - Available and adequate financing options.
    - Agency pre-approvals (dept. of ecology).
    - Ownership & Land rights.
- **Project must be eligible.**
    - There must be additional benefits gained.
    - The practices must be suitable.
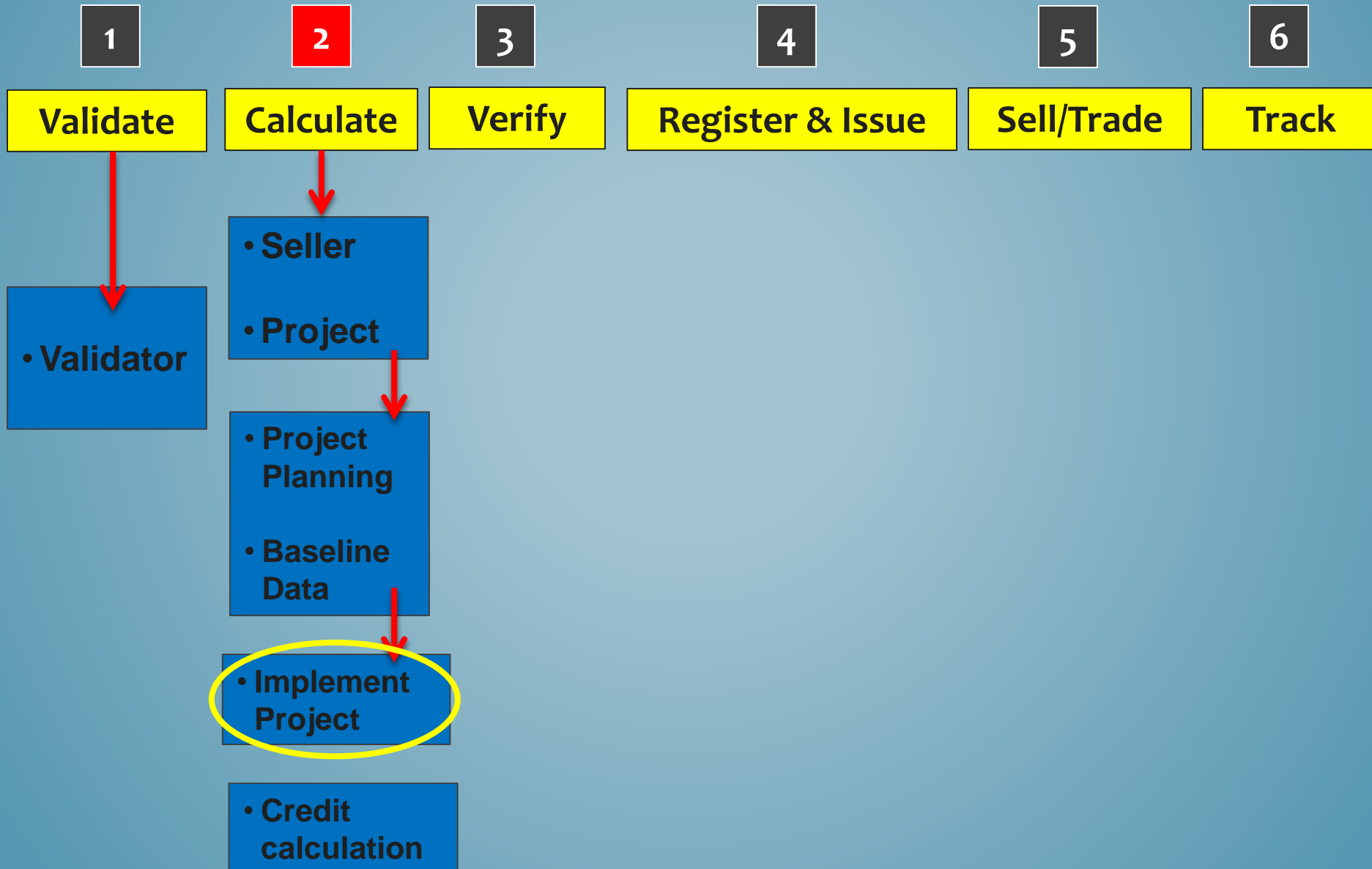   - The benefits must be sustainable.

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PROJECT PLANNING

- **The seller would work with an entity (Service Provider) to prepare the project.**
    - Conceptual and Final Design
    - Permits
    - Agency Approvals (i.e. Dept. of Ecology)

- **Baseline Data Taken** - data is taken, protocol would depend on credit being built and could consist of be multiple values, i.e. credit stacking).

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PROJECT IMPLEMENTATION

The seller would then work with the Service Provider to implement the project.

- The Service Provider or may do the actual implementation or subcontract it.

- Restoration / Construction
  - Move dirt & restore hydrology
  - Initial Planting

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CREDIT CALCULATION

Baseline Data + Post Project Data = Credit*

*during this step, the credit value is an estimate and must still be confirmed by the Verifier and approved by the Certifier.

You have 10 credits of premium quality!

Project Advisor

CREDITS

Credits can be *potentially* earned through practices that improve environmental function. They could be for:

- Land restoration

- Stream improvement

- Nutrient Management

- Best Management Practices

- Must be selected and parameters defined by local experts

SERVICE PROVIDER

Who?

- **Service Provider must have qualified staff to help landowners plan & implement projects, quantify the benefits, and monitor that project.**
  - **Conservation Districts**
  - **Restoration Non-Profits**
  - **Recreation & Irrigation Districts**
  - **State Agencies**
  - **Consultants**

TRAINING & CERTIFICATION

- **Training** is available to provide Service Providers with appropriate knowledge to carry out several roles within the market process that will be approved by project verifiers, certifiers, and buyers.
  - Plan / Design / Permit Project
  - Implement Project
  - Calculate & Verify Credits

- **Trainers** would provide variety of training for Service Providers and other market participants, and issue certificates. Likely trainers:
  - Willamette Partnership
  - RC&D

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- **Project Advisor monitors credit**
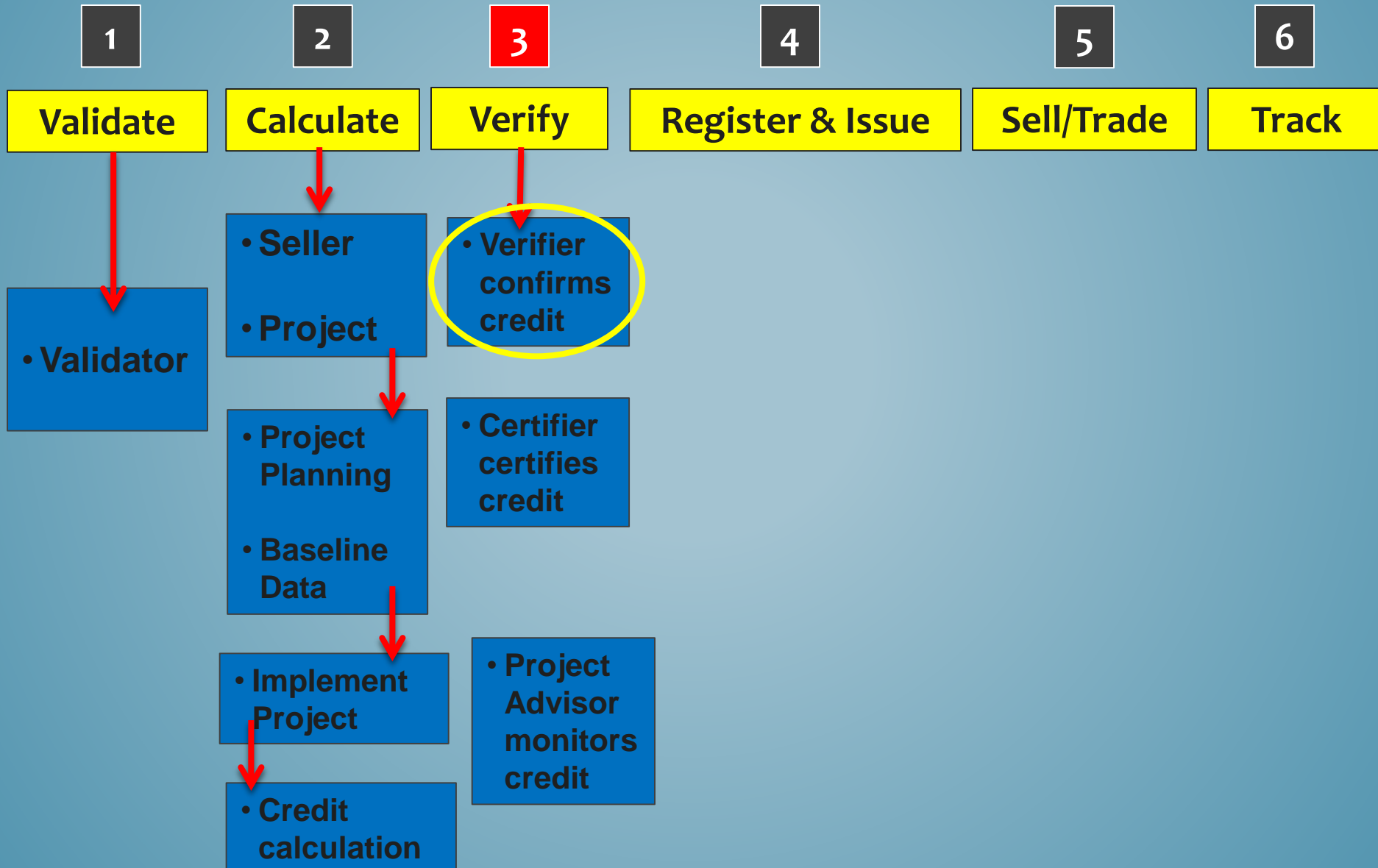
VERIFIER

Who?

- **Verifier** - needs to have capacity to subcontract with multiple Service Providers to conduct the actual on the ground verification. Verifier must carry proper insurance and needs to understand and be willing to take on risk.
  - **RC&Ds!**
- **Service Providers** – conduct on the ground verification of credit (done in step 2).

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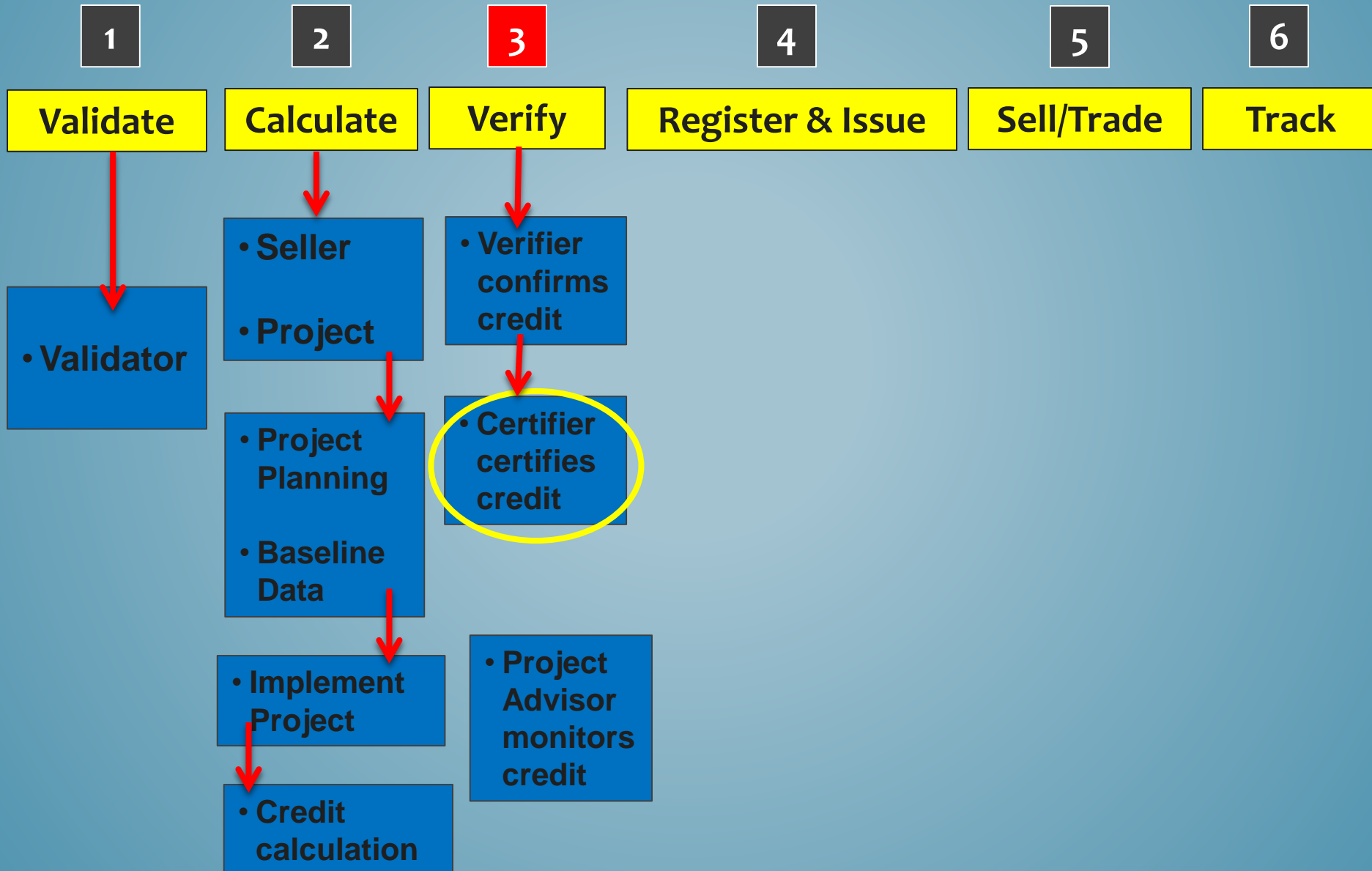
CERTIFIER

Standards were followed

Certifier

Who?

- **Certifier** – The certifier is an agency with regulatory authority given to them by the Environmental Protection Agency to carry out the Clean Water Act in the State of Washington.
  - **Washington Dept. of Ecology**
  - **Army Corps of Engineers**
  - **Indian Tribes (none currently in Washington State)**
- The **Certifier** makes the final decision that all processes were carried out correctly and then certifies the credit.

REGULATOR

To ensure that a market can provide improved ecosystem services to the Yakima Basin, the **Regulator** must be willing to:

- Move forward on setting TMDLs limits in the Yakima River for nutrients and temperature.

- Allow markets to be a tool for permit compliance.

- Review all steps of market development and provide the boundaries.

- Provide technical assistance in developing credit values and trading ratios.

- Write water quality offsets into permits for trading protocols.

We need cleaner water results!

Regulator

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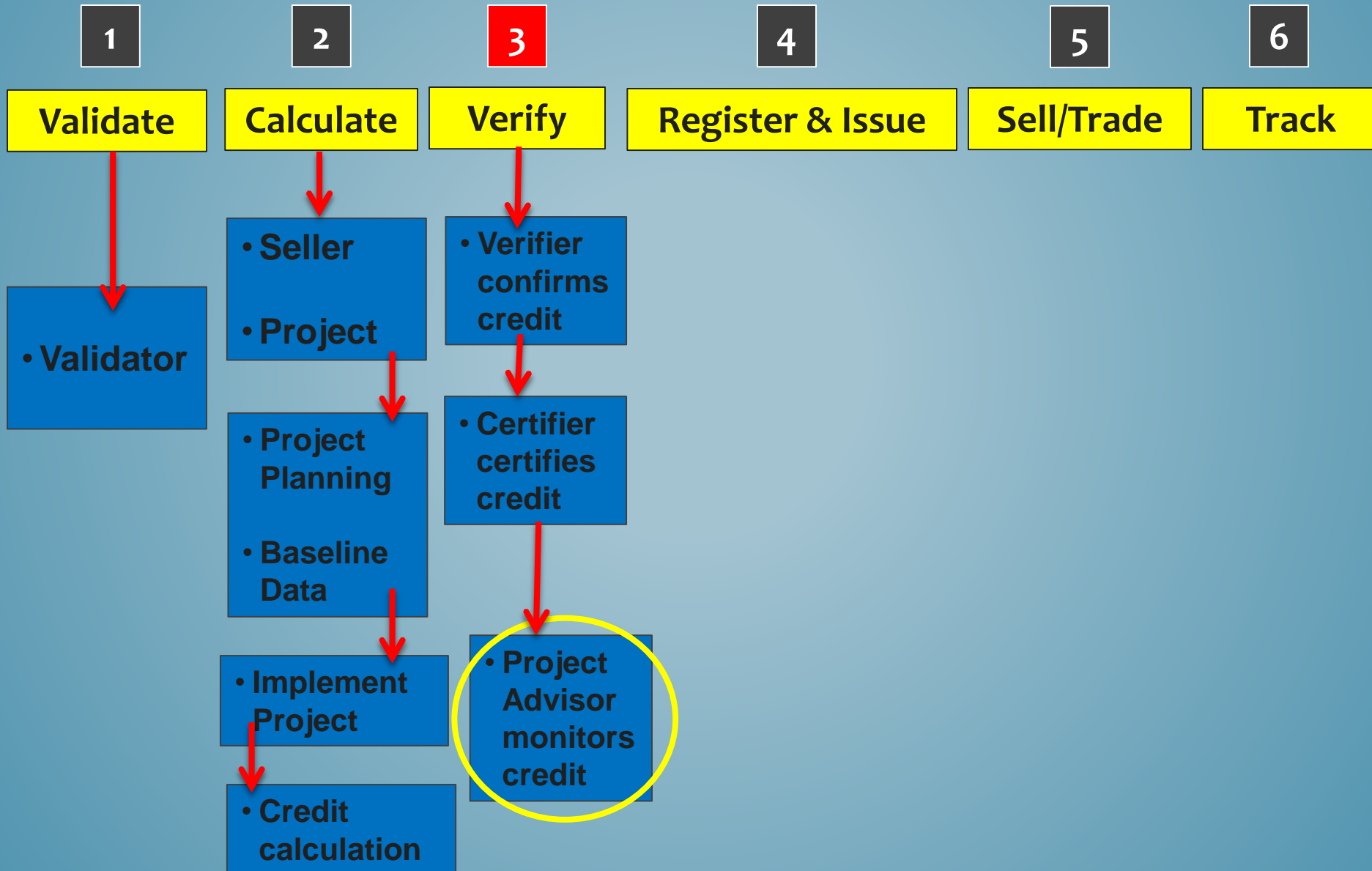
PROJECT MONITORING

- **Service Provider** must be willing and adequately trained to monitor the project for the life of the credit.
- **Monitoring protocol** would depend on the credits earned.
- **Cost of monitoring** is covered by credit purchase.
- **Multiple credit types** could be earned on same land, then requiring multiple monitoring protocols.
- **If landscape features that provide benefits fail** (trees die), then **Service Provider** would determine cause (natural vs. landowner fault).

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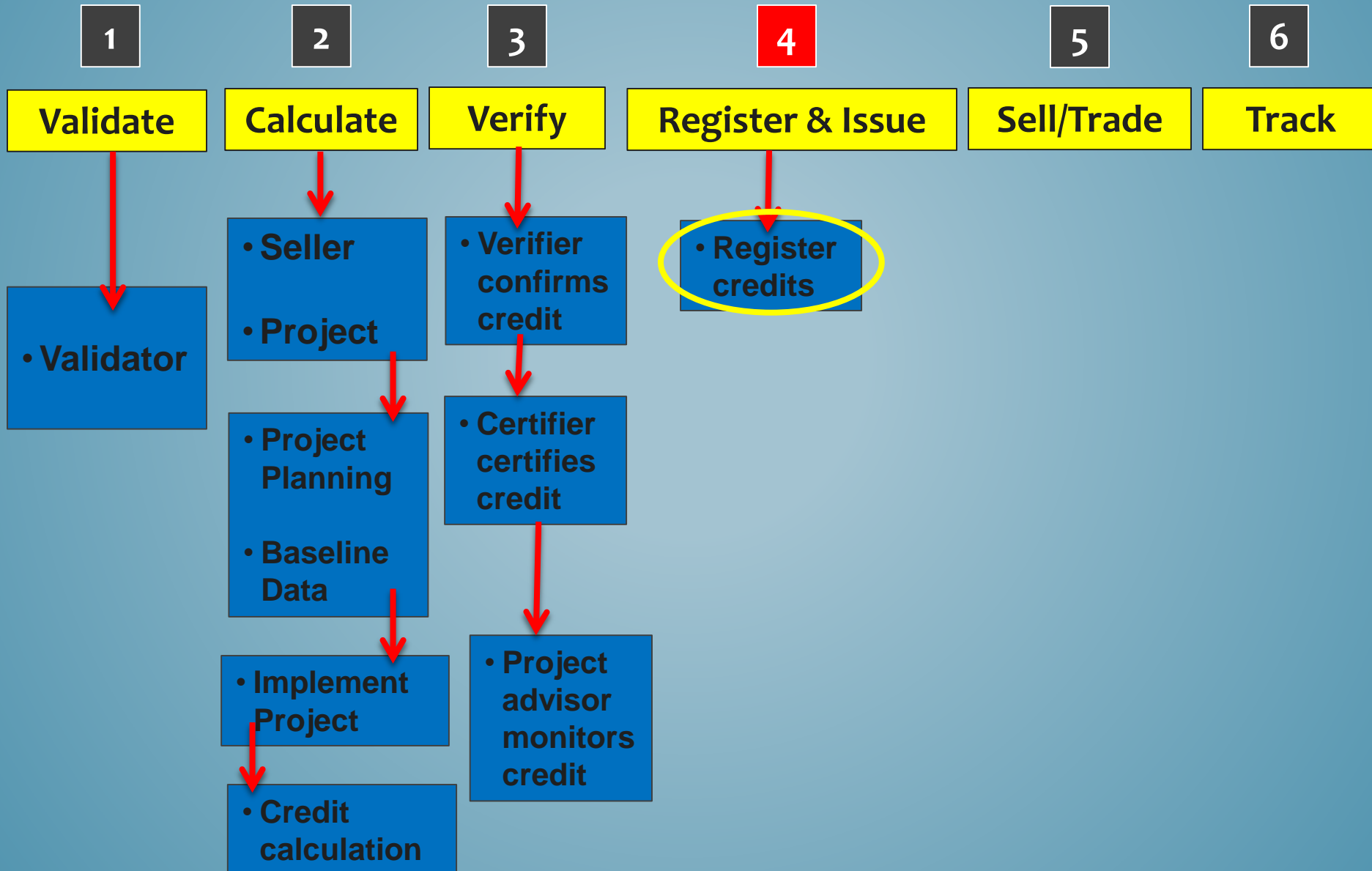
- Register credits

REGISTRATION

- **Credits must be registered in an qualified registry.**
- **Example: MarkIt (www.markit.com)**

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      - **Credit calculation**

- **Verifier confirms credit**
  - **Certifier certifies credit**
    - **Project advisor monitors credit**

- **Register credits**

- **Buyer**

  - **Sell Credits**

BUYER - ELIGIBILITY

- **The buyer** is a permitted entity that must meet requirements for resource issues such as:
    - Clean water
    - Salmon recovery
    - Wetland mitigation
    - Endangered species mitigation

- **The buyer** must implement all reasonable actions to meet regulatory requirements BEFORE looking to the market. Regulator must help set the standard that must be met before participating in market.

- **Buyer's Agent** –helps buyer develop a facilities plan to decide whether upgrade or credit purchase is best choice.
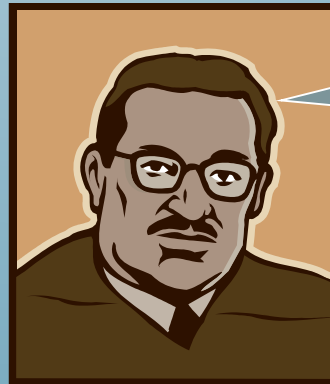
Reduce your Impacts!

Regulator

BUYERS - EXAMPLES

Municipality Wastewater Treatment Plants

– Must reduce nutrients and/or temperature of water.

– City of Yakima, City of Ellensburg, Naches, etc.

Point Source Industry

– Must reduce nutrients and/or temperature of water.

Non Point Source

– Large scale (dairy)
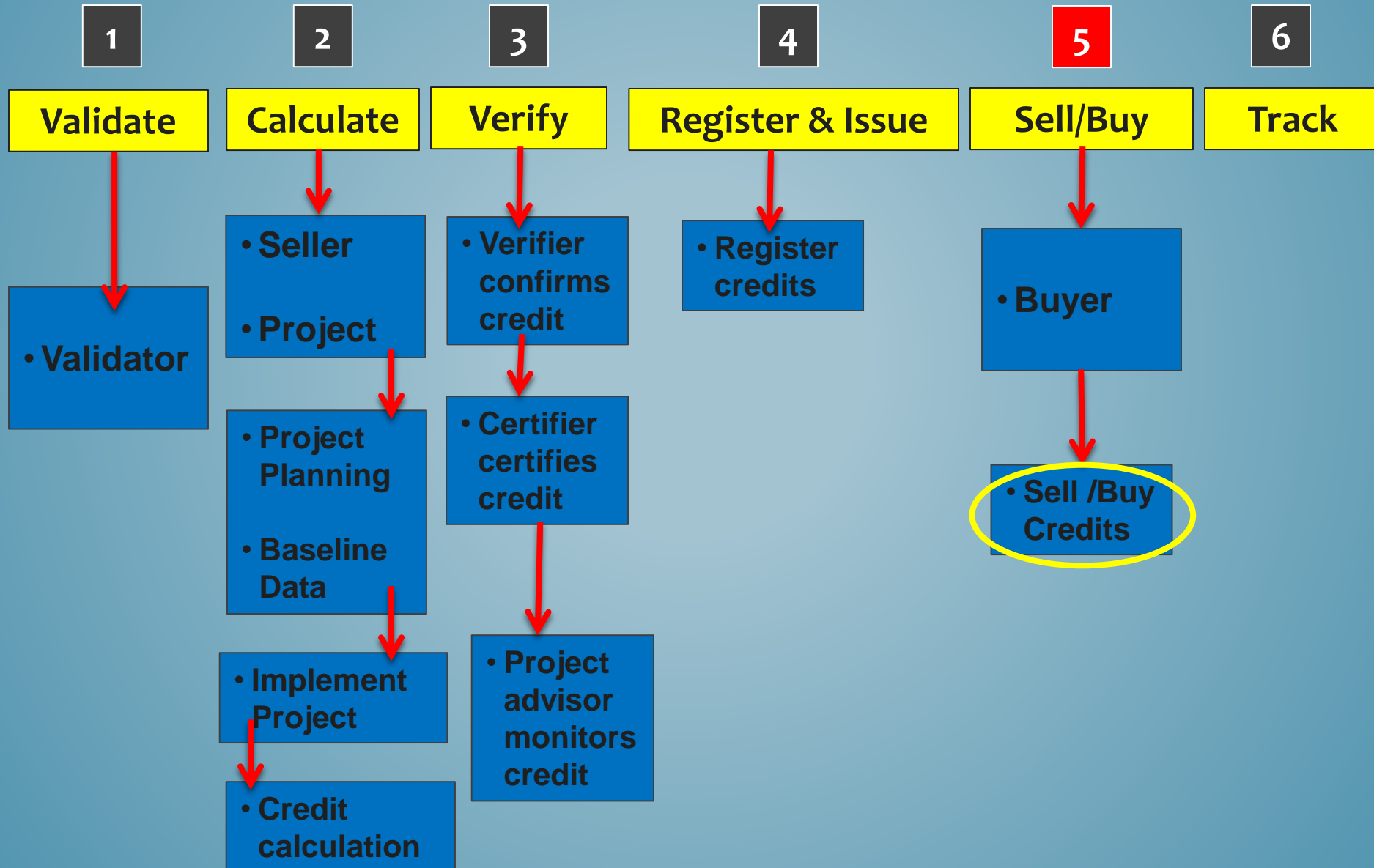
Developers

– Must mitigate impacts of development.

Of course. I can do some myself and I'll look to the market for the rest.

BUYER - MOTIVATION
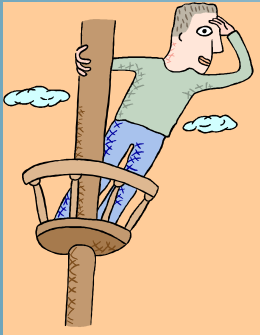
- Must be under regulatory obligation.

- Must have assurances that credits will have quantifiable environmental benefits.

- Must have assurances from regulatory authority that purchase of credit will meet regulatory requirements.

- Have already taken all cost effective measures to reduce impact of their operations.

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4 — **Register & Issue**
- Register credits

5 — **Sell/Buy**
- Buyer
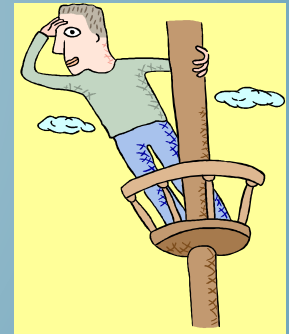- Sell /Buy Credits

6 — **Track**

SELLING

- **Registered credits can now be purchased by the appropriate buyer as a part of permit compliance.**

Buyer's agent

Transactions
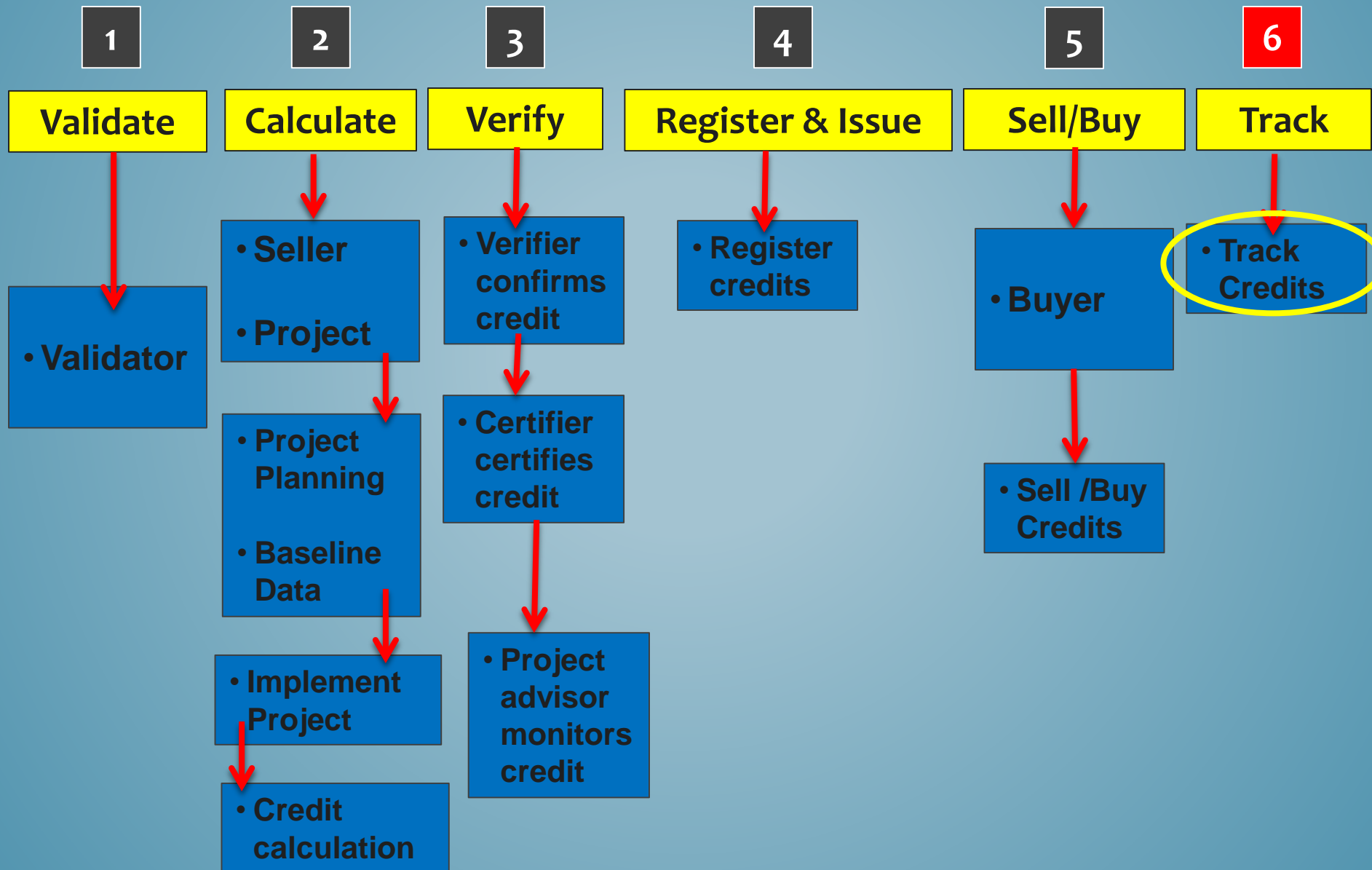
Seller's agent

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- Buyer
- Sell /Buy Credits

6 **Track**
- Track Credits

Bay Bank

Ecosystem Crediting Platform

Project Information | Project Baseline | Project Design | Project Verification | Project Certification | Credit Registration | Credit Issuance | Project Monitoring

Welcome to the Bay Bank's Ecosystem Crediting Platform

This tool helps land managers translate environmental restoration and conservation actions into conservation credits. Users can map their projects, create multiple project designs, and manage their projects through approvals for select conservation programs.

Interested in using the ECP?

If you would like to begin developing conservation projects, register your organization as a service provider at www.thebaybank.org and then request access by sending an email to us at info@thebaybank.org.

Still Have Questions?

Browse the FAQ's »
Contact Us »

How It All Works...

Explore the process!

Use the tabs above to explore how the ECP can work for you. Each tab provides readers with a general summary of a particular step of the ecosystem service credit development process. Please read the FAQ page, reference the glossary, or email us at info@thebaybank.org for more information.

See our FAQ's for more information »

About the Bay Bank

Bay Bank (www.thebaybank.org) is the Chesapeake's conservation marketplace, linking landowners with resources to improve and protect the region's natural resources and working lands. Bay Bank combines the best available tools to enable easy access to local, regional, and national ecosystem markets and conservation programs. Bay Bank is managed by the Pinchot Institute for Conservation.

Bay Bank

Visit http://thebaybank.org
for more information »

Ecosystem Crediting Platform

Welcome to the Willamette Partnership's Ecosystem Crediting Platform (ECP)

This tool translates environmental restoration and conservation actions into ecosystem service credits using the Willamette Partnership's Counting on the Environment standards. Users of this software can map their projects, create multiple project designs, and manage their projects through the required approval process.

Interested in using the ECP?

The Ecosystem Crediting Platform (ECP) is designed for land managers who are eligible to sell credits. To determine if your project is eligible, and to receive an invitation to use the ECP, please fill out the Self-Validation Checklist form and mail it (electronically or physically) to your Local Administrator. The Local Administrator will then review the form and either reply with a Notice of Validation or provide a reason why the project may not be eligible. With a Notice of Validation in hand, you're ready to open an account.

Download the Self-Validation Checklist »

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The Willamette Partnership is a non-profit coalition with a mission to expand the pace, scope, and effectiveness of conservation. It acts as the Local Administrator of the Willamette Basin Ecosystem Marketplace and as the Regional Coordinator of similarly designed programs throughout the Pacific Northwest. More information about the Willamette Partnership may be found on its website: www.willamettepartnership.org

Visit http://willamettepartnership.org for more information »

Ecosystem Crediting Platform

LOGIN ▶

Project Information | Project Baseline | Project Design | Project Verification | Project Certification | Credit Registration | Credit Issuance | Project Monitoring

Yakima Basin Clean Water Partnership

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Great Blue Heron visited 5/12/11

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Yakima Basin Clean Water Partnership

www.scwrcd.org

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QUESTIONS?