EDA PROJECT 07-79-07901 · REGULATORY ROADMAP

Registering seaweed inputs in all 50 states

State registration requirements for kelp extracts, kelp meal and beneficial substances

KUHN SUSTAINABILITY SOLUTIONS

October 8, 2026 · **Regulatory guidance, not legal advice**

PREPARED FOR

SOUTHEAST CONFERENCE

ALASKA MARICULTURE CLUSTER

EXECUTIVE SUMMARY

Principal findings

1

Fertilizer is the primary route

A low-analysis potash guarantee is accepted as fertilizer in 44 states. No efficacy data is required; claims remain nutritional.

2

Nutrient minimums in four states create barrier

NE, AR and MS register a 0-0-1 under another class. WI requires a $25 low-analysis permit. All other states accept the guarantee.

3

Beneficial substance is optimal in two states

CA and NE register seaweed extract with no nutrient guarantee, in the category that includes plant biostimulants.

4

Claims determine federal treatment

Growth-regulation claims bring a product under FIFRA as a pesticide. Nutrient and abiotic-stress claims do not.

5

Two labels cover all 50 states

A 0-0-1 fertilizer label for 44 states; a no-guarantee label for the four beneficial substance and amendment states.

EXECUTIVE SUMMARY

A 0-0-1 liquid seaweed extract registers as a fertilizer in 44 states

44

states register it as a fertilizer on a 1% soluble potash guarantee

4

states register it under another class: beneficial substance (CA, NE) or amendment (AR, MS)

2

states require no registration: Alaska and Hawaii

~$5.6K

first-year direct state fees for one product in all 50 states, low estimate; $8.8K high

Registering one product in all 50 states costs approximately $5,600 to $8,800 in direct state fees in the first year, excluding staff time, consulting and legal review. The principal difficulty is classification rather than cost: states draw the line between fertilizer, soil amendment and beneficial substance differently, and a label accepted in one state may be rejected in another.

REGULATORY CONTEXT

Seaweed inputs do not fit the categories of state fertilizer law

01

Low nutrient content

A kelp extract guarantees about 1% potash. Three states set fertilizer minimums it does not meet.

02

Beneficial substance categories

Most of the value of these products comes from non-nutrients. About a dozen states have a category for them.

03

The FIFRA boundary

Growth-regulation claims bring the same product under FIFRA as a pesticide under EPA's draft guidance.

04

Administrative load

Fifty fee schedules, renewal dates, package-size rules and tonnage reports.

CATEGORY DETERMINATION

Three questions determine the registration class in each state

QUESTION 1

Does the label claim pest control or growth regulation?

If yes: EPA pesticide. Restate as nutrient or stress-tolerance claims.

No →

QUESTION 2

Does the state register fertilizer at all?

If no: AK, HI. No registration; accurate label required.

Yes →

QUESTION 3

Does the state accept a 0-0-1 as a fertilizer?

If no: 4 states use another class: beneficial substance or amendment.

Yes →

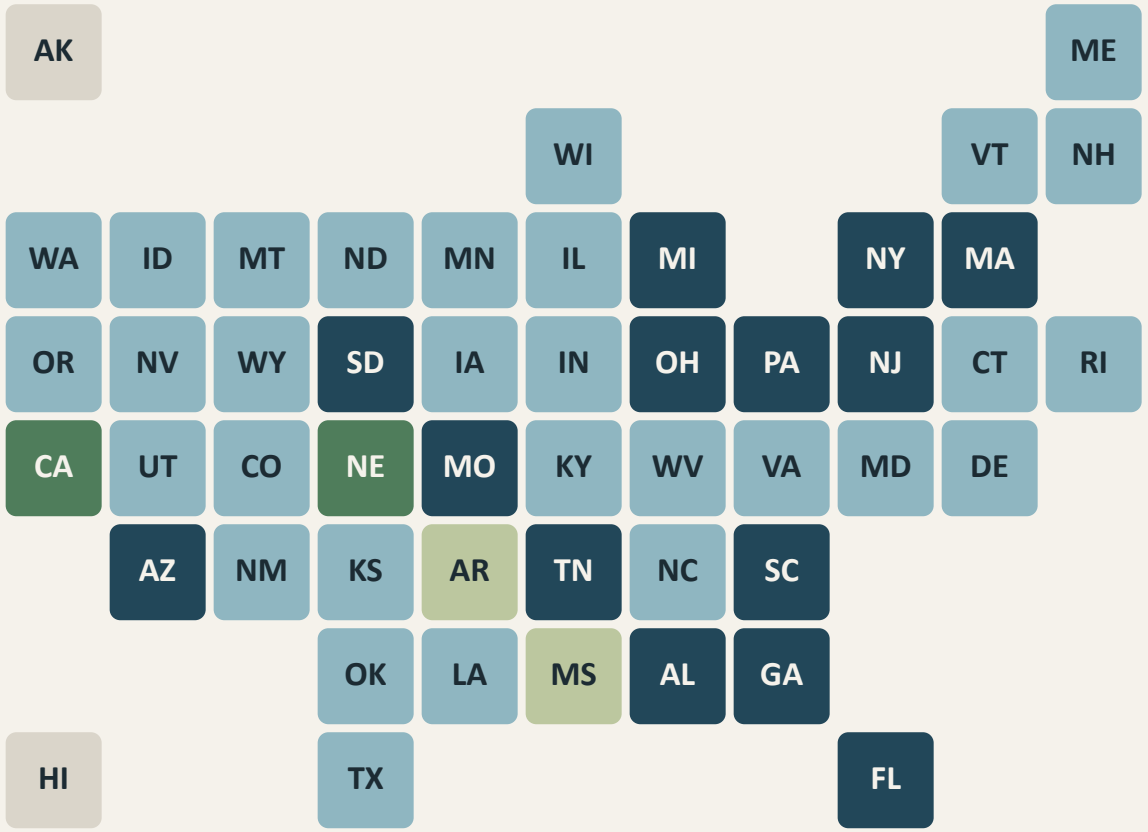
44 STATES

Label 1: nutrient fertilizer, 0-0-1

Dry kelp meal follows the same sequence; AAPFCO names seaweed extract, not meal, as a beneficial substance

REGISTRATION CLASSES

The 50 states fall into five registration classes



14 — **Fertilizer, license only**
One company license; no product registration

30 — **Fertilizer, per-product registration**
Each product registered; 0-0-1 accepted

2 — **Beneficial substance**
Registered with no nutrient guarantee

2 — **Soil or plant amendment**
Nutrient minimum excludes a 0-0-1

2 — **No registration required**
Alaska and Hawaii

KSS 50-state dataset · Number in each key = states in that class · Visual for illustrative purposes

FERTILIZER · LICENSE ONLY · 14

One company license covers farm-channel sales

FIRST-YEAR COST, ONE PRODUCT

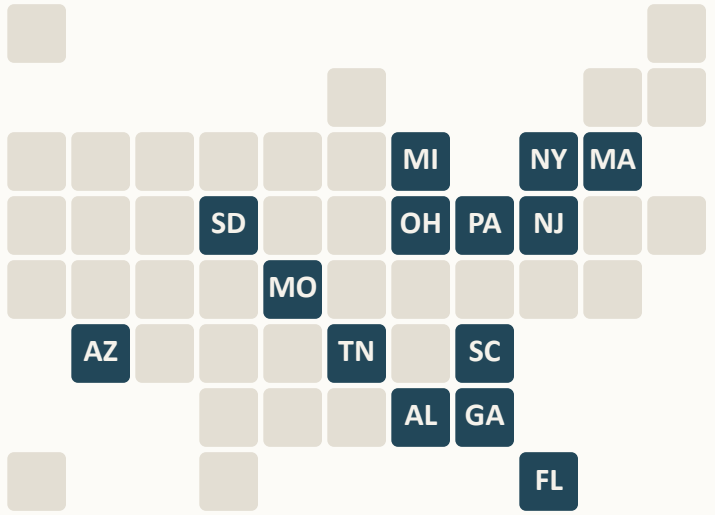
$35–$410

The license follows the company named on the label: New York is $150 for two years with no product fee.

Home, garden and small packages require a per-product specialty fee: 10 lb in Georgia, 49 lb in Florida.

Tonnage reports are the principal obligation. Georgia requires quarterly reports regardless of sales; Alabama requires monthly reports.

LICENSE-ONLY STATES



KSS 50-state dataset, verified October 2026

FERTILIZER · PER-PRODUCT REGISTRATION · 30

Thirty states register each product and accept a 1% potash guarantee

FIRST-YEAR COST, ONE PRODUCT

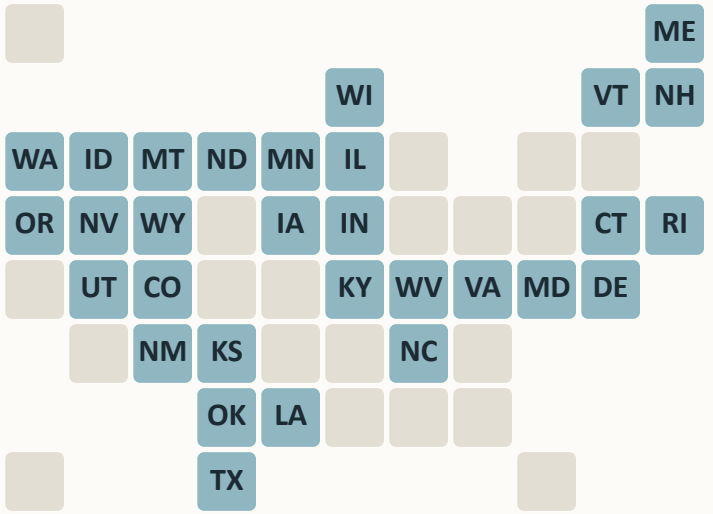
$0–$850

Lowest: Kentucky and Texas charge no registration fee. Highest: Washington, which requires its own metals analysis.

Agency pages lag the law: New Mexico rose from $5 to $50 in July 2026; Idaho repealed tonnage fees in 2022.

Two states require a label adjustment: Wisconsin needs a $25 low-analysis permit; West Virginia lists K_2O only.

PER-PRODUCT STATES



KSS 50-state dataset, verified October 2026

OTHER CLASSES · 4

Four states register seaweed under a class other than fertilizer

Beneficial substance

CA · NE

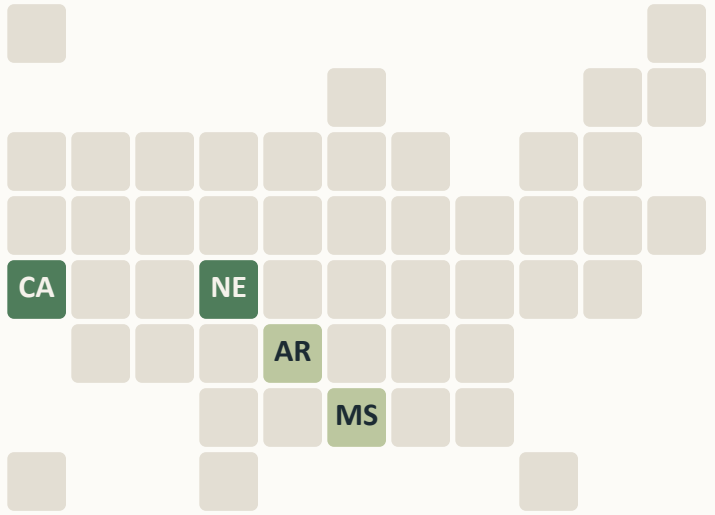
No nutrient guarantee. California allows "plant biostimulant" on kelp labels and requires a metals analysis. Nebraska registers it under LB 948. $75–$1,900.

Amendment

AR · MS

Nutrient minimums exclude a 0-0-1 from fertilizer: Arkansas's 20-unit minimum, Mississippi's 3% potash rule. Amendment registration costs $25 and permits soil claims.

STATES IN OTHER CLASSES



First-year cost for one product · KSS 50-state dataset, verified October 2026

THE FEDERAL LINE

The label, not the ingredient, determines whether seaweed is a pesticide

> *EPA's 2020 draft guidance, not finalized: seaweed extracts are "well documented to have plant regulator activity."*

Claims that remain outside FIFRA

- Supplies potassium or other plant nutrients
- Improves soil structure or nutrient availability
- Improves tolerance to drought, heat or salt stress
- "Improves soil nutrient conditions for root growth," qualified as EPA words it

Claims that bring the product under FIFRA

- "Stimulates root or shoot growth," unqualified
- "Promotes" or "enhances" plant growth
- Regulates growth, flowering, fruit set or ripening
- Suppresses disease or pests; laminarin from kelp is EPA-registered as a fungicide

> **Formal determination:** EPA issues a determination on a specific label (PRIA M009, $3,559, about six months). The Plant Biostimulant Act, passed by the House in 2026, would exclude biostimulant claims from FIFRA.

Source: EPA Guidance for Plant Regulator Products and Claims, Including Plant Biostimulants (draft, Nov 2020)

THE FEDERAL LAYER

No federal biostimulant definition is in force; none would replace state registration

REGULATION	STATUS, OCTOBER 2026	IMPLICATION FOR SEAWEED INPUTS
EPA biostimulant guidance	2020 draft, not finalized	Nutrient, soil and stress claims remain outside FIFRA
Plant Biostimulant Act	In farm bill: House passed Apr 30; Senate Ag advanced Sep 16	Narrows FIFRA only; states still register
AAPFCO model law	Official since Feb 2024; seaweed and kelp extract recognized	One "CONTAINS BENEFICIAL SUBSTANCE(S)" heading, adopted state by state
Organic (NOP, OMRI)	7 CFR 205.601 and 205.602	KOH or NaOH extraction only; arsenic prohibited
Bulk ingredient sales	Registration follows the label name	Suppliers to registrants usually exempt; OR and IN differ

Sources: EPA draft guidance (2020); H.R. 7567; AAPFCO Official Publication; 7 CFR 205

LABELING

Two core labels cover all 50 states

LABEL 1

Nutrient fertilizer

- Soluble Potash (K_2O) 1.0%, derived from *Macrocystis pyrifera* extract
- AAPFCO metals statement
- Nutrient and use claims only; no trace-mineral list

Where: all 44 fertilizer states

LABEL 2

Beneficial substance

- No nutrient guarantee
- "CONTAINS BENEFICIAL SUBSTANCE(S): Seaweed extract __%"
- Plant biostimulant claims where allowed, with data

Where: CA, NE, AR, MS

State statements, not new labels: WV, guarantee K_2O only · WA, WSDA organic mark · OR, no "stimulant" or "health" · permission states, director approval for beneficial substance guarantees

Each additional label variant adds a registration, renewal and report in every state where it is sold

Label 1, nutrient fertilizer: EXAMPLE

LABEL 1 · NUTRIENT FERTILIZER · EXAMPLE LAYOUT

[BRAND] LIQUID KELP

0-0-1

GUARANTEED ANALYSIS
Total Nitrogen (N) 0.0%
Available Phosphate (P_2O_5) 0.0%
Soluble Potash (K_2O) 1.0%
Derived from: *Macrocystis pyrifera* extract.

DIRECTIONS FOR USE: Foliar: mix 1–2 qt per acre in 20 gal of water; apply every 14 days during active growth. Soil: dilute 1:100 and apply to the root zone. *(example rates; must match the data on file)*

CAUTION: Keep out of reach of children. Avoid contact with eyes and skin; rinse with water. Do not exceed labeled rates on stressed plants.

NET CONTENTS: 1 gal (3.79 L) · Net weight 8.9 lb (4.0 kg)
LOT: 26-287 · Manufactured 10/2026
Guaranteed by: [Registrant name], [street address], [city, state ZIP]

Information regarding the contents and levels of metals in this product is available on the internet at aapfco.org/metals.html

[OMRI Listed® mark here only if the product is listed; see note 11]

REQUIRED ELEMENTS · EXAMPLE

1. **Product name.** As registered; a different name is a separate registration.
2. **Grade statement.** 0-0-1 in N-P-K order. West Virginia: no printed zeros; guarantee K_2O only.
3. **Guaranteed analysis.** Colorado order: Total Nitrogen, Available Phosphate, Soluble Potash, other nutrients (elemental). Guarantee only what lab results support.
4. **Derived-from statement.** Source of each guaranteed nutrient, with the seaweed species (required in CA).
5. **Directions for use.** Application method(s) and rate(s) for safe and effective use.
6. **Warning or caution.** Statements needed to avoid harm to the target plant, other plants or animals.
7. **Net contents.** Weight, volume or count. Colorado reports tonnage by weight, so state net weight on liquids.
8. **Lot code.** Date of manufacture or packaging, or an identifying code; shipment date for bulk.
9. **Guarantor.** Name and full address of the registrant.
10. **Metals statement.** AAPFCO metals-website statement; CA and WA metals analysis on file.
11. **Organic mark (optional).** OMRI Listed® seal only if listed; no USDA Organic seal on inputs. OIM registration in CA and WSDA registration in WA before any organic claim.

Colorado notes. A product that differs in name, composition, claims, directions, grade or guaranteed analysis is a separate product and a separate $40 registration. Nutrient and use claims only; no trace-mineral list; no "stimulant" or "health" wording (Oregon). Rates and caution text above are placeholders to be replaced with the registrant's own data.

Label 2, beneficial substance or amendment: EXAMPLE

LABEL 2 · BENEFICIAL SUBSTANCE / PLANT AMENDMENT · EXAMPLE LAYOUT

[BRAND] SEAWEED EXTRACT

Plant amendment

PURPOSE: Improves plant tolerance to drought, heat and salt stress. *(claims as permitted by the state; data on file)*

CONTAINS BENEFICIAL SUBSTANCE(S):
Seaweed extract (*Macrocystis pyrifera*) ..... 25% by weight

INGREDIENTS: *Macrocystis pyrifera* extract, water, potassium hydroxide *(descending order of predominance)*

DIRECTIONS FOR USE: Foliar: mix 1–2 qt per acre in 20 gal of water; apply every 14 days during active growth. Soil: dilute 1:100 and apply to the root zone.

CAUTION: Keep out of reach of children. Avoid contact with eyes and skin; rinse with water.

NET CONTENTS: 1 gal (3.79 L) · Net weight 8.9 lb (4.0 kg)
LOT: 26-287 · Manufactured 10/2026
Guaranteed by: [Registrant name], [street address], [city, state ZIP]

Information regarding the contents and levels of metals in this product is available on the internet at aapfco.org/metals.html

[OMRI Listed® mark here only if the product is listed]

REQUIRED ELEMENTS · EXAMPLE

1. **Product name.** No grade statement and no N-P-K guarantee on this label.
2. **Purpose statement.** The intended effect. Only claims the state permits and the data support; no pest, disease or growth-regulation claims.
3. **Ingredient or composition statement.** All ingredients in descending order of predominance.
4. **Beneficial substance guarantee.** Percent by weight under the state heading: "CONTAINS BENEFICIAL SUBSTANCE(S)" (CA, NE); "Contains Non-Plant Food Ingredients" (CO). CA permits "plant biostimulant" for kelp extract.
5. **Directions for use.** Application method(s) and rate(s).
6. **Warning or caution.** Any statement needed to avoid harm to plants or animals.
7. **Net contents.** Weight or mass, volume, or count; net weight for Colorado tonnage.
8. **Lot code.** Date of manufacture or packaging, or an identifying code.
9. **Guarantor.** Name and full address of the registrant.
10. **Metals statement.** AAPFCO metals-website statement; CA and WA metals analysis on file.
11. **Organic mark (optional).** OMRI Listed® seal only if listed; no USDA Organic seal. OIM registration in CA and WSDA registration in WA before any organic claim.

Where this label is filed. California and Nebraska (beneficial substance), Arkansas (soil amendment) and Mississippi (plant amendment). Colorado is shown for format only; the recommended Colorado route is the fertilizer label. Where a state requires the director's permission for a beneficial substance guarantee (CO, KY, MA, MT, SD, VA), obtain it before printing.

CLAIMS

Stress-tolerance claims are low risk; growth claims are high risk

CLAIM	LABEL 1	LABEL 2	RISK
Supplies soluble potash	Yes	No	None
Derived from giant kelp, cold-processed	Yes	Yes	None if accurate
Tolerance to drought, heat, salt	No	Yes, with data	**Low**
"Plant biostimulant"	No	Where adopted	**Barred wording in OR**
Stimulates root or shoot growth	No	Only tied to nutrients	**High: plant regulator**
Regulates growth or flowering	No	No	**High: pesticide**
"Contains 60+ trace minerals"	No	Yes, with data	**Each must be guaranteed**

Risk per EPA draft guidance (2020) and state label rules · KSS dataset, October 2026

RECOMMENDATIONS

Observations and recommendations

Observations for regulators

1. AAPFCO beneficial substance definitions adopted state by state
2. Mixed-fertilizer minimums applied to single-nutrient materials in some states
3. Metals analyses accepted in every state except CA and WA
4. Zero-sales tonnage reports required in many states

Recommendations for industry

1. Maintain two core labels
2. Keep the CA and WA metals analyses current
3. Confirm fees with the agency before filing
4. Maintain one calendar of every renewal and report

SEQUENCING MARKET ENTRY

Enter one registration class at a time, using one label

1

California first

Beneficial substance; its metals analysis serves every other state

2

License-only states

FL, NY, MI, GA, PA open with one company license each

3

Per-product states

WA, OR, CO, TX first, then NV and the Northeast

4

Remaining states

Other per-product states, same label; AR, MS, NE as demand warrants

5

Label 2

Where beneficial substance claims apply, or if the federal Act passes

Metals analysis: California and Washington each require their own; every other state accepts those results.

REGISTRATION COSTS

Direct state fees are modest; administration is the larger cost

$5.6K–$8.8K

One product, all 50 states, direct state fees only. CA and WA, which require their own metals analysis, are 27% of the low end.

- About a dozen renewal calendars, from June 30 to biennial even years
- Tonnage reports monthly to annually, often with zero sales
- Package size changes the category: 10, 12, 49 lb or 1 gal
- One product in three sizes: more than 100 registrations

KSS 50-state dataset, verified October 2026

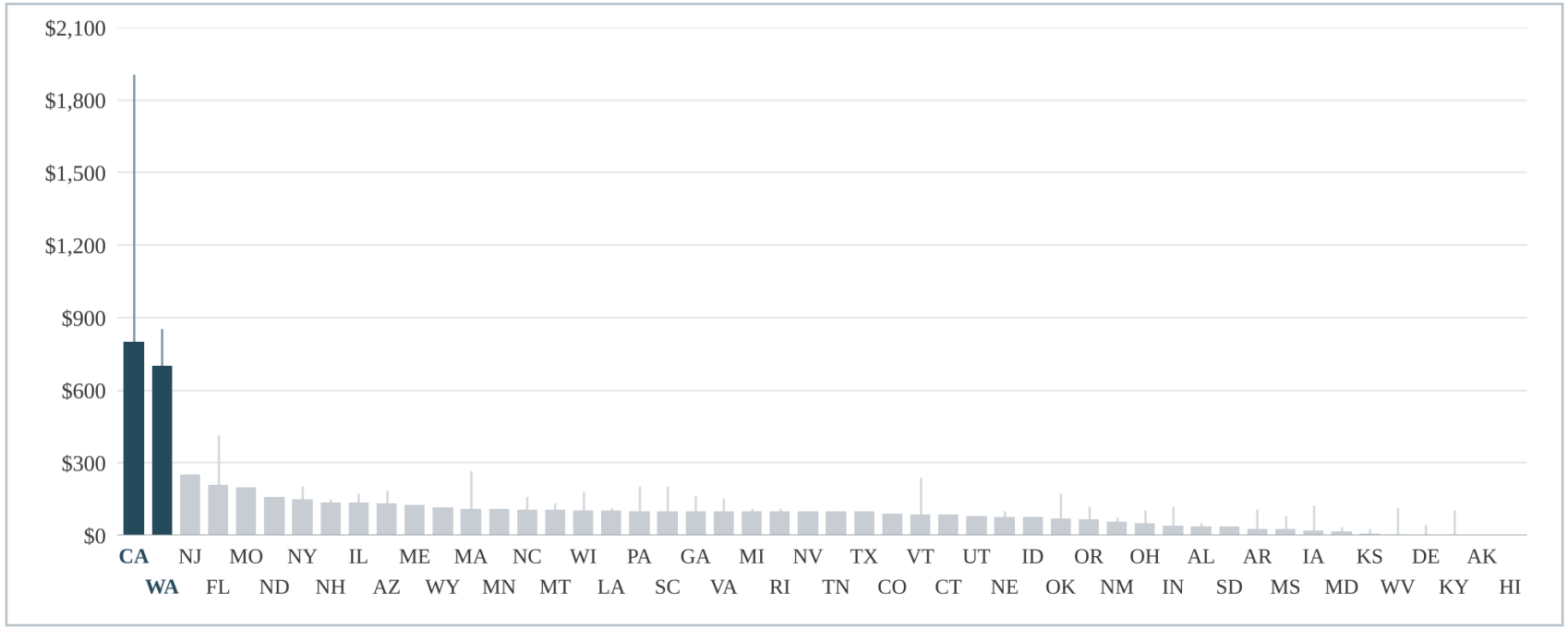
REGISTRATION COSTS

First-year direct state fees for one product, by state

Two metals-testing states carry over a quarter of the first-year bill

One product, all 50 states: $5,590 to $8,780 in first-year state fees. CA and WA: $1,500 (27%) at the low end.

Bar = low estimate for one product at low volume; thin line = high estimate (specialty sizes, optional organic registration).



Source: KSS 50-state dataset, October 2026. Bar = low estimate; line = high estimate. Matches Figure 2 of the report.

State recommendations: Alabama to Colorado

STATE	RECOMMENDATION	WHY	FORM OR INFO
Alabama	Fertilizer (license only)	No per-product fee; license tiered by tonnage, $37.50 under 100 t, plus $0.75/t	License form agi.alabama.gov
Alaska	No registration required	Division of Agriculture has no registration for fertilizer, plant food or soil amendments	Program info dnr.alaska.gov
Arizona	Fertilizer (license only)	$125 license covers farm sales; specialty registration adds $50 for non-farm	Program info agriculture.az.gov
Arkansas	Soil amendment	0-0-1 is below the 20-unit fertilizer minimum; amendment is $25 plus $0.375/t	Form 1081 agriculture.arkansas.gov
California	Beneficial substance	Only state allowing "plant biostimulant" on kelp labels; $200 label, metals analysis; OIM for organic labels	Form 513-023 cdfa.ca.gov
Colorado	Fertilizer	$40 per product plus $50 minimum; beneficial substance heading by permission	Program info ag.colorado.gov

License only · Per product · Beneficial substance · Amendment · No registration

State recommendations: Connecticut to Idaho

STATE	RECOMMENDATION	WHY	FORM OR INFO
Connecticut	Fertilizer	$75 per brand and grade plus $10 minimum; no license	Registration info portal.ct.gov
Delaware	Fertilizer	$1.15 per product in bulk, $40 for 10 lb or less; soil conditioner covers biostimulants	Applications agriculture.delaware.gov
Florida	Fertilizer (license only)	$200 license, no product registration over 49 lb; specialty $200 for smaller packs	Form 13222 fdacs.gov
Georgia	Fertilizer (license only)	$100 license for farm sales; $60 specialty registration for 10 lb or less	Online application agr.ga.gov via Kelly
Hawaii	No registration required	No fertilizer registration found; confirm plant quarantine clearance before shipping	HDOA FAQ dab.hawaii.gov
Idaho	Fertilizer	$75 per product; tonnage fees and reports repealed in 2022	Program info agri.idaho.gov

License only · Per product · Beneficial substance · Amendment · No registration

State recommendations: Illinois to Louisiana

STATE	RECOMMENDATION	WHY	FORM OR INFO
Illinois	Fertilizer	$100 license plus $20 per grade; a processed extract is not "sea solids"	Registration form agr.illinois.gov
Indiana	Fertilizer	$20 per grade on Form B-10, $50 for 12 lb or less; whole-number grades	Form B-10 oisc.purdue.edu
Iowa	Fertilizer (foliar or non-farm label)	Floors exempt foliar and non-farm products; $20 license, $100 for 25 lb or less	Registration guide iowaagriculture.gov
Kansas	Fertilizer	$5 per product plus $1.67/t; no license for registrants	Forms agriculture.ks.gov
Kentucky	Fertilizer (farm use)	Form 1 with no registration fee; $0.50/t with quarterly reports	Forms rs.uky.edu
Louisiana	Fertilizer	The 20% floor covers mixed fertilizer only; $100 small-package route	Program info ldaf.la.gov

License only · Per product · Beneficial substance · Amendment · No registration

State recommendations: Maine to Mississippi

STATE	RECOMMENDATION	WHY	FORM OR INFO
Maine	Fertilizer	$125 per product, no tonnage fee; plant amendment at $25 is the alternative	Program info maine.gov/dacf
Maryland	Fertilizer	$15 bulk, $30 for 10 lb or less; registrations expire January 31	Form FertReg-2 mda.maryland.gov
Massachusetts	Fertilizer (license only)	$250 ag license or $100 specialty registration at current agency rates	Registration info mass.gov
Michigan	Fertilizer (license only)	$100 license; agricultural fertilizer needs no product registration	Requirements michigan.gov/mdard
Minnesota	Specialty fertilizer	$100 per grade; the CA or WA metals analysis covers the arsenic report	Arsenic rules mda.state.mn.us
Mississippi	Plant amendment	Fertilizer needs 3% to guarantee potash; amendment is $25 and covers biostimulants	Program info mdac.ms.gov

License only · Per product · Beneficial substance · Amendment · No registration

State recommendations: Missouri to New Jersey

STATE	RECOMMENDATION	WHY	FORM OR INFO
Missouri	Fertilizer (permit only)	$100 permit, no product registration; 60¢/t with a $50 minimum per period	Program info mofcb.com
Montana	Fertilizer	$75 license plus $30 per product; $1/t; renews every December 31	Registration form agr.mt.gov
Nebraska	Beneficial substance	20% N+P+K minimum excludes farm fertilizer; LB 948 registration is $50 per product plus $25 license	Program info nda.nebraska.gov
Nevada	Fertilizer	$80 per product online; quarterly tonnage reports	Online portal agri.nv.gov
New Hampshire	Fertilizer	$128 per grade; no numeric nutrient minimum	Product registration agriculture.nh.gov
New Jersey	Fertilizer (license only)	$250 firm license with no product fee; no biostimulant category	License form nj.gov

License only · Per product · Beneficial substance · Amendment · No registration

State recommendations: New Mexico to Ohio

STATE	RECOMMENDATION	WHY	FORM OR INFO
New Mexico	Fertilizer	$50 per product since July 2026 (SB 143); agency pages still show $5	Registration form nmdeptag.nmsu.edu
New York	Fertilizer (license only)	$150 two-year license lists every product; $50 annual tonnage minimum	Program info agriculture.ny.gov
North Carolina	Fertilizer, or soil additive with no nutrient claims	$100 license plus $5 per grade at the whole-number grade 0-0-1	Registration package ncagr.gov
North Dakota	Fertilizer	$100 license plus $50 per product; new biostimulant chapter at the same fees	Guidelines ndda.nd.gov
Ohio	Fertilizer (license only)	$50 license for farm sales; $50 specialty registration for non-farm	License form agri.ohio.gov

License only · Per product · Beneficial substance · Amendment · No registration

State recommendations: Oklahoma to South Carolina

STATE	RECOMMENDATION	WHY	FORM OR INFO
Oklahoma	Fertilizer	$50 license; permanent registration over 30 lb; $100 specialty under 30 lb	Registration form ag.ok.gov
Oregon	Fertilizer	$35 per product; accepts the CA or WA metals analysis; no "stimulant" wording	Form MPR oregon.gov/oda
Pennsylvania	Fertilizer (license only)	$50 license for farm sales; plant amendment at $25 allows growth claims	License form pa.gov
Rhode Island	Fertilizer	$100 per grade, no license; expires December 31	Portal guide dem.ri.gov
South Carolina	Fertilizer (license only)	$100 license plus $1.50/t; $30 specialty registration	Program info clemson.edu

License only · Per product · Beneficial substance · Amendment · No registration

State recommendations: South Dakota to Vermont

STATE	RECOMMENDATION	WHY	FORM OR INFO
South Dakota	Fertilizer (license only)	$25 license with no product registration; $0.90/t	Program info danr.sd.gov
Tennessee	Fertilizer (license only)	$100 minimum license, no product registration; claims limited to nutrients	Forms tn.gov/agriculture
Texas	Fertilizer	Permanent no-fee registration; $100 prepaid inspection minimum	Forms otsc.tamu.edu
Utah	Fertilizer	$60 per product; the 2025 Plant Food Act also registers biostimulants	Registration form ag.utah.gov
Vermont	Fertilizer	$85 per product; beneficial substance route available at the same fee with no tonnage minimum	Program info agriculture.vermont.gov

License only · Per product · Beneficial substance · Amendment · No registration

State recommendations: Virginia to Wyoming

STATE	RECOMMENDATION	WHY	FORM OR INFO
Virginia	Specialty fertilizer	$50 license plus $50 per grade; the 3% floor covers mixed fertilizer only	Registration info vdacs.virginia.gov
Washington	Fertilizer	$150 for two years; metals analysis; $50 bulk license for tote sales	Registration info agr.wa.gov
West Virginia	Fertilizer, K_2O guarantee only	$4 per grade; zero guarantees may not print, so list K_2O alone	Registration form agriculture.wv.gov
Wisconsin	Fertilizer with low-analysis permit	1% K_2O meets the minimum exactly; $25 permit; soil additive route is $125	License instructions datcp.wi.gov
Wyoming	Fertilizer	$115 per product; no license or tonnage fee	Registration form agriculture.wy.gov

License only · Per product · Beneficial substance · Amendment · No registration

Thank You

Every figure was verified from statutes, rules and agency fee schedules as of October 8, 2026 and checked by an independent review. Agencies change fees and interpretations without notice. Confirm with each agency before filing. **This is regulatory guidance, not legal advice**.