

Grants – Crafting a scope of work

Hello, and welcome to one in a series of virtual informational videos from DPR's Grants Program.

My name is Jordan Weibel, I'm the Research Grants Program lead.

Today we will be discussing crafting a scope of work, including writing objectives, tasks, and deliverables.

Today's session objectives include understanding the purpose and role feature the following components of the scope of work.

These are: the intended audience, the project abstract, and project summary sections, the team members, the project's goals, and the subsidiary objectives, tasks, and deliverables.

An overview of what the scope of work includes:

First, it includes general information about the proposed project.

This is in the form of items like the title, a project abstract, a slightly more expansive project summary, the project's broad goals, and the list of team members.

Further definition is added on how the project will be carried out through the objectives and the tasks.

Finally, the information provided to DPR includes the deliverables and due dates informs the proof that the tasks have been completed.

The audience for your scope of work includes the people who are reviewing your application - this is the Pest Management Advisory Committee, a diverse stakeholder group that helps DPR review our proposal applications, as well as DPR's internal reviewers.

The scope of work is intended to show how the project will accomplish its goals and objectives, and for any funded projects, the scope of work submitted with the proposal is used to help draft the grant agreement between DPR and the grantee.

As general rules, the scope of work should use a formal tone and clear language.

Avoid jargon, define all acronyms, and be understandable to both scientific and non-scientific audiences.

The first short answer section of this area of the application is the project abstract.

This is a brief statement that is streamlined and should include the proposed project's purpose, priorities, scope, and grant beneficiaries.

The beneficiaries are those who will benefit from the execution of the funded project.

Examples are communities, stakeholders, individual organizations, or entities.

For funded grants, this statement is provided and posted to the California Grants Portal.

The abstract should be succinct and understandable to the general public.

Here we see an example from our sample Alliance scope of work document, and these sample documents can be found as part of the guidance documents posted to our website.

We see the purpose, priorities, scope, and grant beneficiaries laid out as part of this short statement.

The project summary follows after the project abstract.

It is a brief, one-page-maximum and compelling description of the proposed project, and it should be understandable to the general public.

The project summary is more expansive than the project abstract, and it should provide a broad overview of the proposed project.

It needs to address the relevance of the project the mission of DPR, and it should not include or rely on references.

For Research Grants, it's important to include within your project summary experimental design details, such as whether controlled or observational approaches will be used, some brief methods, such as the statistical or modeling choices to be used, as well as, once again, the relevance to DPR's mission.

For Alliance Grants, there are some slight differences.

It is important to address the target audience and geographical area, the outreach and communication framework that will be used, its potential for implementation, expansion, and adoption, methods for measuring success (which may take many forms within our Alliance Grants Program), and, finally, once again, the relevance of the project to DPR's mission.

Here is an example of a project summary, and it includes some sections that we have just discussed, including the purpose, the target audience, and the geographical area and outreach framework.

Note that this is a snippet from a full project summary that is, once again, available as part of the guidance documents posted on our website.

This example continues, and we show here the measurement of success, implementation potential, and relevance to Department mission sections of the project summary.

Once again, you're encouraged to review the project summary example in its entirety within the supplemental guidance documents found on our website.

Next comes the list of personnel.

Within this list of team members is, first and foremost, the principal investigator, or PI.

The PI is the individual who has the primary responsibility for both the financial management and control of project funds and administration, including the scientific integrity and management of the project, adhering to DPR's terms and conditions, and monitoring performance and expenditures of all consultants, subcontractors, and subawardees.

They must personally participate in the project to a significant degree, and there may be some cases where a co-PI or co-PI's are acceptable, however, these are uncommon.

A curriculum vitae or resume must be provided for the PI or any co-PI's in the application package.

Key Personnel.

This group of personnel is the next most important set of personnel after the PI.

These individuals contribute to the scientific development or execution of the project in a substantive, measurable way, and they, similar to the PI, do not necessarily need to receive salary.

They must devote a measurable percentage of effort to the project, and this should be reported in your materials, and it does not typically include students or other named staff that are not specifically required for the completion of the scope of work. Note here that key personnel are personnel that, without which, the project would not achieve its goals.

Staff that may be easily substituted will fall into another class of personnel to be discussed in upcoming slides.

A curriculum vitae or resume must also be provided for key personnel, similar to the principal investigator, and if the project is funded, any changes in these key personnel would require a grant amendment.

Next, non-key personnel.

These often include students or other named staff that are not specifically required for completion of the scope of work - an important difference from the key personnel.

Often, these roles are yet to be filled at the time of application, and thus a TBD, or to be determined, is an acceptable placeholder.

For the Alliance Grants, this section should list all known Alliance team members, whether they will be participating as paid or unpaid, and key personnel or non-key personnel, similar to above.

List any unfilled positions as "TBD" with a short description of the role.

For more information about the Alliance Team, consider reviewing the "Building a Strong Alliance Team" informational video.

Here is an example list of team members from the sample Alliance scope of work previously referenced.

These include a principal investigator, non-key personnel, and key personnel.

Next, the goals section.

Goals are broad, general, bulleted statements about what the project needs to accomplish to fulfill its stated purpose.

They should be measurable and achievable within the frame of the project, and they're closely correlated with the deliverables.

Here are some example goals from the sample Alliance scope of work available within the supplemental guidance document.

Engage and educate community members and field crews in identifying and documenting observations of invasive and early detection and rapid response listed species through the use of a mobile application.

Devise a plan for land managers to verify observations submitted by community members and field crews.

Implement appropriate control favoring non-chemical methods.

Evaluate and refine the early detection and rapid response program for future adoption.

Perform outreach by promoting and demonstrating the program in other regions.

Here we have sample goals from the sample Research Grants scope of work - evaluate prophylactic treatments and delivery methods for suppressing *Xylella fastidiosa* in grapevine.

Optimize conditions for establishing and maintaining parasitoid wasp populations to combat glassy-winged sharpshooters in citrus groves.

Determine if an integrated pest management system incorporating prophylactic treatments in vineyards and parasitoid wasp mediates the suppression of glassy-winged sharpshooters in citrus groves synergistically reduce the prevalence and spread of Pierce's disease.

After the goals come objectives.

The objectives are short statements that include the descriptions of the process that will lead to the results that achieve the project's goals.

They are more specific than goals, and one or more objective must be developed for each goal.

Objective 1 is consistent across all grants and cannot be modified by the applicant, as it contains administrative and reporting requirements that are common to all DPR grants.

Here we see some of these Objective 1 tasks, deliverables, and due dates for Research Grants.

A research plan is required as part of Objective 1, and for Alliance Grants, an outreach plan is required for task 1.2 as part of Objective 1.

In task 1.6, as we see, here annual reports are required, and Task 1.8 demonstrates the final report requirements.

Here is an example of an objective from the Research Grant scope of work.

Once again, these objectives should begin with Objective 2 onwards for your proposal application.

Objective 2: identify the most effective prophylactic treatment and delivery method for suppression of *Xylella fastidiosa* in grapevine.

Note how this corresponds directly to the first goal from the example list of goals previously shown.

Next come tasks.

Tasks are descriptions of the step-by-step work plan activities that must be successfully completed to achieve the stated objectives.

These include things like modeling, experiments, analyses, field trials, meetings, developing training materials, conducting surveys, and much more.

Tasks generate data and other end results that can be formed into deliverables that we will discuss shortly.

Here is an example task from the Research scope of work:

Task 2.1 - Greenhouse study to assess the effects of three different foliar sprayed antimicrobial compounds on *Xylella fastidiosa* in grapevine.

And then text follows describing how this task will be conducted.

Important notes about tasks - when describing tasks, try to avoid overly specific details that would pigeonhole your project into a specific course of action that might need to be modified later.

Task descriptions should provide enough detail to show that there is a clear plan for achieving the objectives, but also be broad enough to allow for flexibility in the future if experimental design considerations change.

Instead of incorporating more-detailed task descriptions in the scope of work, they should be included in Question 4 of the proposal application.

If the proposed project is funded, Question 4 often forms the basis of the research or outreach plan described in Task 1.2.

Next come deliverables.

Deliverables are the end results or products of tasks, and are specifically associated with them.

They provide tangible and specific proof that task has been completed and there should be the ability to determine if a task was successful or not from the deliverable.

One or more deliverable must be specified for each task, and each deliverable must specify a due date and can include multiple due dates for tasks with multiple deliveries.

Here are some example deliverables from the Research Grant scope of work.

Task 2.1, described previously, the greenhouse study to assess the effects of three different foliar sprayed antimicrobial compounds on *Xylella fastidiosa* in grapevine.

The associated deliverable is: report detailing results along with tables, figures, images, and statistical analyses as needed to support the findings.

A second example: Task 5.3 - published results of the project in trade journals.

The deliverable: final drafts of article to be published in trade journals will be submitted 20 business days prior to publishing date.

Some notes about deliverable due dates.

First, some notes on linear tasks.

For tasks that rely on the completion of a prior task, the corresponding deliverable should have separate due dates.

An example of this is if one task is carrying out a field trial, and another analyzes the results from that trial, the field trial delivery due date should be before the analysis delivery due date.

Other deliverables recur and have due dates that are also recurring throughout the project.

These include things that have a regular schedule, such as attending multiple conferences or administering multiple trainings where the deliverable would be the same and be delivered multiple times, or for regularly scheduled deliverables such as annual repeats of the same type of field trial, or quarterly summaries of outreach events conducted over the past quarter.

Here we see an example of a recurring task: Task 5.2 - Outreach: present the most recent results at citrus and grape grower annual meetings.

We see here that the due date associated with the deliverable is April 30th of 2025 and April 30th of 2026.

So some important notes about deliverable due dates - all deliverables intended for public release must be submitted for review at least 20 days prior to publication or public release.

These due dates should thus be at least 20 days prior to any publication deadlines.

The final deliverable due date must occur before the project end date.

This is June 30th for the final year of the project.

Aim to include a moderate level of detail in deliverables.

Extensive detail, as noted prior, should instead be included in the research or outreach plan submitted as Task 1.2.

So, let's review.

Here, we see an example from the Alliance Grant scope of work.

The project itself employs community science for early detection and rapid response to optimize control of invasive plants in California wildlands.

We see a goal: engage and educate community members and field crews in identifying and documenting observations of invasive and early detection and rapid response listed species through the use of mobile application.

We see an objective associated with this goal: prepare members of the public and field crews to participate as community scientists in monitoring for early detection and rapid response species.

A task associated with this objective: produce instructional materials.

As well as information about how this task will proceed.

Finally, a deliverable associated with this task: files of all content created along with the web address for the social media page.

Some information about the deliverable: files will be sent to the grant manager via email at least 20 days prior to publication for review and approval by DPR.

Finally, we have some general reminders and tips for success.

Avoid linear timelines where deliverables depend on prior deliverables if at all possible.

These linear timelines can cause delays, sometimes significant ones, when those initial single deliverables are delayed and cause large problems for the project's overall delivery.

Define any acronyms the first time they are used and avoid using jargon.

Read the applicable terms and conditions.

Terms and conditions are available for University of California and Cal State University system applicants, as well as non-UC or CSU applicants.

Verify that no terms are violated within the proposed scope of work, such as travel outside of California.

Make sure to proofread the entire document and check that due dates are correctly recorded in the schedule of deliverables table and that all due dates fall within the project performance period.

Remember that all reviewers will also read the grant application questions numbers 1-4, so avoid including redundant information that is not pertinent to the scope of work.

Write for all audiences, including scientific and non-scientific.

If you'd like to learn more, please visit our website at www.cdpr.ca.gov/DPRgrants or send us an email at IPMgrants@cdpr.ca.gov.